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ABSTRACT

The funding of public elementary and secondary schools in Oklahoma is examined in this report. In accordance with legislative requirements, a Special Joint Committee of the Oklahoma Legislature undertook an assessment of the current school finance formula for state aid and made recommendations on changes needed to provide equitable funding for equal educational opportunities through the distribution of state appropriations. This report is divided into nine chapters dealing with the following topics: (1) formation, makeup, and legislative charge of the Special Joint Committee; (2) basic assumptions and methodology of the report; (3) analysis of current education funding system; (4) cost of quality education in Oklahoma; (5) sources of revenue; (6) shortfall adjustments; (7) transition formulas; (8) recommendations for action; and (9) recommendations for further study. Twelve tables, and 23 charts supplement the text, and an appendix lists constitutional and statutory changes required for policy implementation of the models discussed. (SI)

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OKLAHOMA SCHOOL FINANCE

A Study with Recommendations

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FINAL REPORT SPECIAL JOINT COMMITTEE ON SCHOOL FINANCE

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EA 021 441

STATE OF OKLAHOMA

Representative Jim Barker
Speaker of the House

House of Representatives
State Capitol Building
Oklahoma City, Oklahoma 73105

Senator Rodger A. Randle
President Pro Tempore

Oklahoma State Senate
State Capitol Building
Oklahoma City, Oklahoma 73105

LETTER OF TRANSMITTAL

February 2, 1986

The Honorable Henry Bellmon, Governor
State of Oklahoma

Representative Jim Barker, Speaker
Oklahoma House of Representatives

Senator Rodger A. Randle, President Pro Tempore
Oklahoma Senate

Dear Governor Bellmon, Representative Barker and Senator Randle:

Pursuant to Section 45 of House Bill 1035 enacted by the First Session of the 40th Oklahoma Legislature, the Special Joint Committee on School Finance was created to study the funding of public elementary and secondary schools.

The Committee met a number of times from October, 1985 to December, 1986 to carry out its task. In accordance with the legislative requirement, the study undertook an assessment of the current school finance formula for State Aid and recommendations on any changes needed to provide equitable funding for equal educational opportunities through the distribution of state appropriations.

As Chairman and Vice Chairman of the Special Joint Committee on School Finance, we would like to present the results of this study in the form of a report to you. The recommendations include school funding reforms in both the collection and distribution of revenue and appropriations which the Committee strongly feels are needed to achieve our goal of equal educational opportunity for all children in Oklahoma.

Sincerely,

Steve Lewis

Representative Steve Lewis, Chairman
Special Joint Committee on School Finance

Bernice Shedrick

Senator Bernice Shedrick, Vice Chairman
Special Joint Committee on School Finance

OKLAHOMA SCHOOL FINANCE: A STUDY WITH RECOMMENDATIONS

A report to the Governor of Oklahoma,
the Speaker of the House of Representatives,
and the President Pro Tempore of the Senate

Special Joint Committee on School Finance
The Oklahoma Legislature

Representative Steve Lewis, Chairman
Senator Bernice Shedrick, Vice-Chairman

December 1986

Rodger A. Randle
President Pro Tempore
Senate

Jim Barker
Speaker
House of Representatives

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Ms. Donna Russell, Teacher, Moore Public Schools

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EXECUTIVE SUMMARY

Fundamental Assumptions

The two fundamental assumptions of the Special Joint Committee were that each child in the State of Oklahoma has the right of equal access to a quality, accredited educational program and that the purpose of state aid to local school districts is to compensate only where local resources cannot provide for basic and uncontrollable costs. State assistance is not needed where local resources are adequate. The goal of the Committee has been to develop a school finance system which will provide each district with at least the minimum resources needed to provide a high quality educational program.

The funding formulas adopted in 1981, with subsequent modifications, sought to address the variations in local educational costs and financial resources. The formulas drew upon work done in other states, research done in Oklahoma, and legislative consideration. This report is a comprehensive attempt to examine the factors which influence the cost of an education in Oklahoma, to translate those factors into formulas, and to examine the degree to which current formulas provide for the costs. The Committee then makes recommendations for revisions in the existing funding formulas.

In analyzing data, cost per student figures were regularly used to make comparisons among districts possible. Since district costs are tied to the number of students enrolled and do not decrease appreciably due to student absence, all per student figures are based on dollars per student in average daily membership (ADM). The most current available data was used in preparing the models. Unless otherwise indicated, all student and cost data are based on the 1985-86 school year. All property tax data are based on the 1985 tax year.

There is an important distinction to be made between discretionary costs and uncontrollable costs: the decision to offer three classes of ten students each versus two classes of fifteen is more expensive, but the expense is optional. The need to provide one teacher for only four or five severely retarded and multiply-handicapped students, and the higher resulting cost, is unavoidable. With few exceptions, it is the general policy of this Committee that the state has a responsibility for guaranteeing only uncontrollable costs. Local choices should be financed by local taxpayers.

Local support for education is almost entirely derived from ad valorem levies. The committee based its models on the assumption of a uniform 12% assessment ratio for real and personal property and an assessment ratio for public service property of 26.25%. For modeling purposes, the committee assumed that all valuation has been done at full market-use value.

The committee found the cost of education by modeling "optimum" schools and calculating the costs of operating these schools. Then the committee analyzed the impact of various changes, particularly in the size of the campuses, and determined the revised costs of operations.

Once the cost of each district's program needs was determined, an examination was made of the resources available to districts. The Committee worked out two estimates of the cost of the model program to the state, with the two estimates differing in certain assumptions. One assumed the continuation of existing law on the distribution of dedicated state revenue and the chargeability of local millages against the formula. The second assumed that dedicated revenues would be distributed according to the formula and that all local millages would be equally chargeable. The second set of assumptions produced a significant saving to the state and is the set used throughout this report.

Distribution of Local Resources

The ability to raise revenue locally for education differs greatly among Oklahoma school districts. Part of the difference in ability springs from different assessment practices, but the variation is largely the result of the property base on which districts can levy taxes. Every district levies the maximum allowable millage for general fund purposes of 35 mills. Each district also receives 4 mills levied countywide.

Assessment practices could, in theory, create a difference of 67% in valuation of two counties with equal market-use values of property as a result of the Poulos III case (Okl. 646 P.2nd. 1269 in 1982). It permits property to be assessed with a six percentage point range centered on the established ratio, currently 12%. This allows a 67% spread because 15% is two-thirds more than 9%. In actual practice, only a few counties assess at more than 12% of market-use value and none over 13%. The resulting variation is only slightly over 40%.

On the other hand, the district in Oklahoma with the poorest local tax base has an assessed value per pupil of $1,125 while the wealthiest district in the state possesses more than $340,000 per pupil in assessed value--a range of over 30,000%.

Distribution of State Resources - Dedicated Income

The state returns various taxes and fees to the district or the county where they were generated for allocation to school districts on a per student basis. There is great variation in the amounts districts receive from these sources. Many districts have little in the way of resources covered by these taxes and fees, and dependent school districts receive no allocation from their county's auto license fees or gross production taxes.

Distribution of State Resources - State Aid

The state provides assistance to school districts through three formulas: Foundation Aid, Transportation Supplement Aid, and Incentive Aid. These constitute what may be thought of as basic financial support for public schools. They make up for the inability of local resources to fully fund a quality education program by providing relatively more state funding to poorer districts, per student, than to richer districts.

Districts also receive state aid through several categorical line-item grants and through various "hold-harmless" provisions that act to protect districts against a loss of state funding in comparison with the previous year's funding. Categorical aid plus hold-harmless funding is 13.7% of total state aid to local districts, and in many districts it exceeds the amount to which the district would be entitled under the formulas.

Distribution of State Resources - Hold-Harmless

The "hold-harmless" guarantee was originally intended as a transitional funding mechanism, but it has become a continuing feature of state educational funding in Oklahoma. It began as a guarantee of a fixed level of funding but has become a cumulative "floating" guarantee. For FY-83 it was enlarged to include teacher and support personnel salary increases which had been paid across-the-board in FY-82. For FY-86 the hold-harmless provision cost $66.1 million of the $785 million Financial Support of Public Schools line item.

Retention and expansion of the initial hold-harmless level has in actuality frozen the pupil count at the 1978-79 level and taxable wealth at the 1980 level as the bases on which districts' state aid is calculated. School districts with declining enrollment or increasing wealth benefit substantially. Subsequent effects of funding reductions have reduced hold-harmless guarantees, as well as funding levels for non hold-harmless districts.

Distribution of State Resources - Categorical Appropriations

Close to $50 million or 5.8% of the state money appropriated to schools is earmarked for special purposes and is not subject to formula distribution. Funds are line-itemed for different purposes, such as Textbook Purchases and Staff Development. Funding for these two items is allocated statewide on the basis of average daily attendance without regard to district wealth.

A large share of line-item funding reimburses districts for the cost of services mandated by the state. Teacher Consultant Stipends, Class Size Reduction aid and funding for education of homebound children fall into this category. School Lunch expenditures for children from low income families are funded through line-items for programs and federal matching purposes. The Transportation Grant uses the same distributional formula as the Transportation Supplement in the line-item for Financial Support of Public Schools, but is not subject to hold-harmless provisions.

One of the most important purposes of line-item funding is "initiative". Competitive grants are used to provide seed money to encourage districts to participate in such programs as Library Resources and Early Childhood Education.

Over the past ten years the number of line-items has increased from six to twenty (not counting salary increases and supplemental general funding) and has grown in amount from about $10 million to $48 million, although the amount as a percentage of total budget has declined.

Distribution of Total Expenditures

There is a very wide range of income among the districts. The range is summarized in the table below (Table 6 in the main text). It shows the distribution of total operating revenues from local and state sources. It excludes revenue from federal sources.

Table 6

OPERATING INCOME FROM LOCAL AND STATE SOURCES

% of Districts at This Income Level or Below	Local and Dedicated + State Income in $ / ADM	# of Students at This Value or Below
Lowest District	$ 1,777	475
10%	2,010	83,474
25%	2,123	245,326
Median District	2,328	427,069
75%	2,816	546,648
90%	3,825	571,943
Highest District	18,799	584,442
Average (Mean)	$ 2,297	401,613

One half of the students are in districts with less than $2,170 per pupil in total operating revenue.

The variation shown in Table 6 is extreme. The costs of operating school districts do not explain the range seen in Table 6. The actual reasons for the wide variation are laid out in Table 7, which ranks the districts by wealth and divides them into deciles, equal tenths, ranging from the poorest to the wealthiest in taxable wealth per pupil. Thus, as Oklahoma has 613 school districts, the first decile includes the 61 poorest districts in Oklahoma, and the tenth decile includes the 61 wealthiest.

Table 7

OPERATING INCOME FROM LOCAL AND STATE SOURCES

Decile	Local Revenue Per ADM	Dedicated Income Per ADM	State Aid Per ADM	Total State/Local Revenue Per ADM	Hold-Harmless Per ADM	Average Taxable Wealth* Per Pupil
1	$ 313	$ 205	$ 1642	$ 2161	$ 6	$ 5,501
2	382	257	1444	2084	1	7,870
3	457	357	1300	2116	12	9,578
4	507	303	1320	2132	17	11,566
5	634	351	1182	2168	18	13,761
6	680	361	1125	2167	30	16,009
7	846	412	1013	2273	92	19,605
8	915	373	975	2264	132	27,301
9	1,260	379	1026	2666	342	35,658
10	2,493	757	1274	4525	1188	66,487

* Adjusted 12% Assessment Ratio

Table 7 shows that total state/local revenue per ADM is fairly similar for the poorest 80% of districts, the first eight deciles, regardless of the average wealth of the districts. But in deciles 9 and 10, the wealthiest two deciles, the total state/local revenue per ADM increases sharply.

The greater amounts of dedicated income and hold-harmless income per ADM contribute to the increase. The Foundation and Incentive Aid formulas adjust for variations in local and dedicated resources by subtracting them from calculations of program cost. This is an equalizing process. The hold-harmless formulas and dedicated income work in the opposite direction and, in practice, increase disparities that exist because of differences in district wealth at the upper end of the scale of wealth.

This is clearly evident in Decile 10, the wealthiest, where local revenue alone exceeds total revenue for any of the first eight deciles. It is quite possible that in the districts included in Decile 10, local revenue may exceed basic program costs. The existing system for apportioning state funds to districts adds more funds. In the absence of a recapture provision, the existing state funding provisions and the existence of dedicated revenue widen the inequality of resources among districts.

Programmatic Implications of Differences in District Resources

Differences in money available do not translate directly into good vs. bad educational programs. Nonetheless, teachers with skills, experience, and training are attracted to districts in part by salary levels above statutory minimums. Differing resources can greatly affect the range of programs offered, the level of individual attention paid to students, the career options open to teachers and other professionals, and many other elements of the educational process.

One Oklahoma high school has 8 teachers and 24 students--virtually a tutorial program. Another Oklahoma high school has only 4 teachers for 52 students. No level of professional dedication can equalize the difference in the opportunities the two schools can offer. In elementary schools, the average pupil/teacher ratio varies from less than 7 students per teacher to more than 25. In middle schools, the range is from an average of less than 10/1 up to 28/1. For high schools, the range is from 3/1 up to more than 32/1. The range of experience and advanced training of teachers also varies widely among districts.

Abundant resources not only allow some districts to attract well-trained and experienced teachers, but may also allow them to hire counselors, curriculum specialists, and others who can improve educational offerings, as well as purchase instructional materials, computers, lab equipment, and library resources that are out of the reach of their poorer neighbors.

Alternatively or in addition to the above, wealthier districts may lower taxes or spend money on high administrative overhead or non-essential expenses. To a great extent, such decisions are a local matter. But to the extent that state funding produces inequitable expenditure, adding wealth to the wealthy while inadequately funding the poor, or allowing wealthy districts to tax less, it is a subject for state concern.

The Cost of Quality Education in Oklahoma
Optimal and Small Size Schools

Clearly there are significant disparities in funding among Oklahoma school districts. The Special Joint Committee designed measures of equity to make it possible to see what programmatic needs exist in school districts, and calculated the total expenditures needed to provide high quality education for all students in Oklahoma.

To examine adequacy of funding, the Special Joint Committee first attempted to determine the cost of the regular education program in school districts, and calculated the total expenditure needed to provide high quality education for all students in Oklahoma. The committee designed schools with the optimum size of enrollment, student/teacher ratio, auxiliary professional services, and other operating expenditures. These models are the foundation for all that follows in this report. It found that the most cost-efficient sizes for schools are as follows:

K - Grade 5 Elementary School	470 students
Grades 6 - 8 Middle School	700 students
Four-year High School	1,200 students

Some Oklahoma districts lack the number of students required to meet the optimum school sizes. Therefore the Special Joint Committee established the cost of programs of equivalent quality for students in schools that are smaller than the optimum. As expected, providing educational opportunities at the optimum level when campus enrollment is below optimum size increased in cost more per student.

Funding and the Cost of Special Education Programs

The Special Joint Committee's research on this issue revealed that the current process by which funds are provided for special education pupils required adjustments, but that the present sources of revenue for special education pupils generate more revenue than is being used for the intended purpose. The committee therefore primarily addressed the issue of equity of funding, and developed a revised system of weighting special education pupils for funding purposes.

The current special education formula structure uses three methods to place money in school districts for handicapped students. First, the Foundation Aid Base Foundation Support Level regular program allotment of $910 is multiplied by each student in average daily attendance. Second, weights are assigned to students on the basis of their handicapping condition. Third, the Incentive Aid formula provides a guaranteed amount per mill of effort above 15 mills through the 35 mill limit for current operations. Since all Oklahoma schools are now at the maximum, each district utilizes 20 mills in the formula.

The sum of all of these sources of special education money is currently approximately $161,000,000. However, only the amount of money generated by the add-on weights times $910 in the Foundation Aid Formula, $37,500,000, is thought to be revenue available specifically for the education of the handicapped. The common assumption, therefore, is that special education is

grossly underfunded. However, these three sources of revenue produce an amount far in excess of what is currently being spent on the education of handicapped pupils.

Research in other states and the experience of the State Department of Education provided a basis for assigning weights to each classification of handicapped students based on typical instructional arrangements. The resulting formula is "weight times FTE proxy times the regular program allotment under the committee's recommended basic school program." (The regular program allotment is $1,674, the amount necessary per regular elementary student in the most cost efficient size elementary school.)

In computer simulations using available data, the formulas would generate approximately $144,000,000 statewide for use in direct special education instructional services, related services to handicapped students, and indirect costs associated with the special education program's fair share of utilities, insurance and general administration. A maximum of 20% of the special education revenue available should be used to provide for indirect costs. As a result $115,200,000 would be available for direct instructional services and related services.

The best available estimate of special education expenditures is less than $100,000,000. It seems clear that the recommended formulas would increase the funding directly available to special education programs, while still costing less than current state formulas generate for handicapped children.

The interim system fully described in the main text should be used for starting the basic school program payments for 1987-88 while the Department of Education conducts research on creation of a permanent formula based on instructional arrangement for adjusting payments at the end of FY-88 and for use thereafter.

Uncontrollable Costs that Create District Teacher Salary Differentials

The actual level of teachers' salaries in any given district involves a number of circumstances. The state mandates a schedule of minimum salaries that provides higher salaries for higher levels of training and years of experience. Districts are free to enrich (pay more than) the minimum.

Districts' decisions to do so are undoubtedly based on many considerations. The report, however, focuses on two important factors in enrichment, which the Special Joint Committee found to merit careful attention. These two factors at present distort district decisions on allotting money for teachers' salaries and other operating expenditures. Without legislative approval of the recommendations made in these two sections, these factors will continue to produce differences in educational quality among districts. The present concern is to recognize the way in which the interaction of the present funding formula and the mandated salary schedule distort districts' decisions.

Experience and Training

The problem addressed here is that two districts with student loads and teaching staffs of identical size could have teacher salary costs of very different amounts. District A, with a staff of mostly experienced teachers, would pay much more in salary than District B with a largely inexperienced staff. If the two districts have equal tax bases, District A would have much less for expenditures other than teachers' salaries than District B; the current state formula for salary incentive aid would not give District A enough additional money to cover its additional salary costs because the formula does not fully take such costs into account.

Districts whose expenditures thus are skewed toward salaries, such as District A, may have to enlarge class size, buy fewer instructional materials, or find other economies. An alternative to economies in non-teaching expenditure is to prefer inexperienced personnel to well-trained and experienced personnel. Thus the present funding mechanism contains a disincentive to the retention of highly qualified and experienced personnel because it does not fully provide for the variable degrees of experience and training among districts' teachers.

It can be argued that the impact of the salary schedule is a controllable cost and that its impact should be locally financed. The Special Joint Committee rejected this approach because it felt that quality education is the goal of the state funding formula, and that therefore the formula should contain no disincentives to quality, even if the disincentive can, in some cases, be made up by local effort. Therefore the committee devised a formula, the "Experienced Teacher Index," to use in adjusting grants to common schools to mitigate the impact of this cost.

District Variances and Market Conditions

Districts that are in a highly competitive employment market also suffer from distortion of expenditure decisions. The existing formula draws no distinction between districts in which teachers' salaries are inflated by competition and those which can attract teachers of equivalent quality with lower salaries because of less competition. The Special Joint Committee recommends a formula adjustment to deal with the adverse impact of such competition.

School districts are not only in competition with each other for teachers, but that they compete with other employers. Uncontrollable salary enrichment is the amount a district is compelled to pay a minimally qualified person above the mandated minimum for that person in order to meet the competition from other industry. This is uncontrollable because a district must do this to have enough teachers. Controllable enrichment is the further amount paid to give a district more choice among candidates. The committee was concerned with uncontrollable enrichment--the amounts that districts have to add to salaries to match their competitors.

The biggest problem with determining what uncontrollable enrichment costs are for a district is defining the market. The committee learned that there are two markets in which a district competes. One is the local or regional

market, involving employers other than school districts. For purposes of analysis, the committee defined this market as the county in which a district is located. The other market is districts of comparable size, measured by student population. The committee therefore developed an index to adjust state grants to districts to allow for the uncontrollable costs of competition in these markets.

Transportation Funding

The Special Joint Committee found that inequities result from the present formula for dividing state support for student transportation costs among districts. Districts spent $66 million on student transportation in 1984-85, excluding student activity expenses and capital costs. The state formulas provided $27 million of that amount. The state does not provide funding for fleet growth or bus replacement.

The Special Joint Committee's analysis of the practical impact of the formula revealed various problems: (1) The formula does not work to produce an inverse relationship between district wealth and the state share of funding. (2) The state share as a percentage of district transportation costs is extremely low in urban districts. (3) The state share is greater than costs in 11 districts, but is a very small percentage of costs in many districts. The Committee therefore examined alternatives in order to find a more equitable formula.

The Committee's findings, briefly stated, were that in most cases transportation costs are driven by linear density (pupils transported per mile). A new formula for transportation was developed to more accurately reflect costs. It is based on linear density, with an adjustment for areal density (pupils per square mile) when linear density is high. The state also should establish a separate formula to assist with the replacement of buses.

Revenue

The optimum program developed would cost a total of $2.1 billion annually, which is about $665 million or 46% more than 1984-85 total expenditure for public schools in Oklahoma. The Special Joint Committee examined some funding mechanisms to help meet the additional need. The Committee's principal recommendations are as follows:

1. A uniform 12% assessment ratio rate for ad valorem purposes, and valuation of property at full market-use value throughout the state.

2. Charging the full allowable 39 mills of local effort against program costs in determining state aid.

3. In instances of students being transferred between districts, payment of a fee by the district from which the transferred student comes.

4. Distribution of dedicated state revenues through the formula instead of the present method.

Shortfall Adjustments

The recommended revisions to funding mechanisms would raise additional funds for education and provide a greater equity of revenues among districts than exists now. In particular, a requirement that real and personal property assessment ratios be uniformly set at 12% would increase local funding by $102 million per year, to about $448 million. Legislative enactment of this recommendation could immediately produce greater equity and funding for common education. Additional future revenues, not taken into account in this report, would be realized if all real property valuation in the state were made, as law requires, at full market-use value.

Despite this increase, the Special Joint Committee recognized that the state's present financial climate will not allow the state to increase funding to meet the more than $2 billion expenditure required by the model program. Therefore the committee reconsidered the model in order to reduce its cost to a more manageable figure. This reflects the committee decision that the lengthy process of redesigning the optimum model was preferable to allowing cuts to be made on an arbitrary or across-the-board basis.

The one change common to all models was a reduction from a recommended 15% level of benefits for personnel to the 11.14% that currently is the state average. For the elementary and middle school models, the cuts focused on non-instructional expenses. Numbers of school nurses, librarians, aides, clerks, and secretaries were cut from the models. In the high school model, planned instructional expenses were cut by increasing the recommended student/teacher ratio from 20:1 in the optimum models to 22:1. The committee found the new ratio acceptable because the original recommendation was far from current practice. The revised recommendation is closer to but still below the current average ratio for high schools.

These changes meant that, other than in employee benefits, there was little change in the elementary or middle school models, with major savings coming from the changes in the high school model and from a revised and reduced calculation of the impact of smaller campus sizes. Another saving gained from the high school models was the elimination of the 75 student campus because of the new higher student/teacher ratio. The committee considered and rejected other possible cost reductions. The savings from the recommendations made here are about $100 million.

Transition Formulas

Transition formulas, also known as "hold-harmless" provisions, are used to ease the budgetary and political impact of fundamental changes in state funding for public education. In times of growth, a hold-harmless provision may take the form of guaranteeing the current level of funding for one or more subsequent years. Such action constitutes a transition to formula funding, since the rising levels of formula support will soon catch up with the guarantee.

When revenues are stable or declining, such an approach defeats the purpose of formula funding, since no transition movement can occur. In addition, the hold-harmless provision "captures" revenue which would otherwise go to poor or high cost districts, perpetuating inequity. In such times, transition formulas frequently use declining percentages of guarantee. For example, the hold-harmless provision might guarantee 50% of the difference between current and formula funding as a "cushion" in the first year, 25% in the second year, and full formula funding for the third year and after.

Guaranteeing gross dollar amounts can actually increase inequity if student population declines. This has been the case in Oklahoma where many districts have achieved increases in per pupil state support, due to declining enrollment. This can occur even if the local tax base and consequent tax collections show a dramatic increase. Such an increase would normally cause a decrease in state aid when no formula change occurs.

The first inequity can be avoided by making the hold-harmless a guarantee of per pupil amounts. Thus, a decline in enrollment would be reflected in total aid. This is, after all, what occurs to districts not affected by the hold-harmless. The second problem can be addressed by making the hold-harmless a guarantee of the effect of previous formulas. In other words, it is figured by calculating aid under both old and new formula, using current data, and guaranteeing the higher. Thus, changes in local wealth have their normal effect.

CHAPTER I

FORMATION, MAKE-UP, AND LEGISLATIVE CHARGE OF THE SPECIAL JOINT COMMITTEE ON SCHOOL FINANCE

The Special Joint Committee on School Finance was established by the Oklahoma Legislature in July, 1985 to study the funding of public elementary and secondary education in Oklahoma. It was charged with reviewing the current school finance formulas and making recommendations on any changes needed to provide funding for equitable educational opportunities.

The enabling legislation provided for the membership of the Governor or his designee, ten people appointed by the Speaker of the House, ten people appointed by the President Pro Tempore of the Senate, and the Chairman of the State Tax Commission or his designee. The membership was to include legislators, professional educators, and lay people reflecting school districts of diverse size and wealth. The appointments consisted of ten legislators, six school superintendents, one teacher and one teacher representative, a journalist, and the State Superintendent of Public Instruction. The committee was chaired by Representative Steve Lewis. Senator Bernice Shedrick served as vice-chairman.

In creating the models and in approval of this report, the committee operated democratically, with full participation of attending members. When possible, decisions were reached by consensus; otherwise votes were taken to resolve differences. The committee permitted open comment from audience observers.

The committee was aided by the staffs of the House and Senate and of the Department of Education. House staff participants included Ms. Paulette Shafer, Ms. Debbie Terlip, Mr. William Graham, and Mr. Ronald Snell who provided editorial assistance. Department of Education staff who worked on this project were Ms. Pat Crist, Director of Research and Data Services, Ms. Pam Deering, Director of Finance, Ms. Jauna Head, Assistant Administrator of Research, and Mr. Tom Pickens, Coordinator of Research.

Additional assistance was provided by consultants employed by the committee to conduct various aspects of research and to aid in the preparation of this report. Consultants retained were State Representative Paul Colbert of Houston, Texas; Dr. Richard Hooker of the College of Education at the University of Houston; Dr. Alexander Holmes of the College of Business at the University of Oklahoma; and Dr. Kenneth McKinley of the College of Education at Oklahoma State University.

CHAPTER II

BASIC ASSUMPTIONS AND METHODOLOGY

The two fundamental assumptions of the Special Joint Committee were that each child in the State of Oklahoma has the right of equal access to a quality, accredited educational program and that the purpose of state aid to local school districts is to compensate only where local resources cannot provide for basic and uncontrollable costs. State assistance is not needed where local resources are adequate. The goal of the committee has been to develop a school finance system which will provide each district with at least the minimum resources needed to provide a high quality educational program.

The funding formulas adopted in 1981, with subsequent modifications, sought to address the variations in local educational costs and financial resources. The formulas drew upon work done in other states, research done in Oklahoma, and legislative consideration. This report is a comprehensive attempt to examine the factors which influence the cost of an education in Oklahoma, to translate those factors into formulas, and to examine the degree to which current formulas provide for the costs. It then makes recommendations for revisions in the existing funding formulas.

In analyzing data, cost per student figures were regularly used to make comparisons among districts possible. Since district costs are tied to the number of students enrolled and do not decrease appreciably due to student absence, all per student figures are based on dollars per student in average daily membership (ADM). The most current available data was used in preparing the models. Unless otherwise indicated, all student and cost data are based on the 1985-86 school year. All property tax data are based on the 1985 tax year.

There is an important distinction to be made between discretionary costs and uncontrollable costs: the decision to offer three classes of ten students each versus two classes of fifteen is more expensive, but the expense is optional. The need to provide one teacher for only four or five severely retarded and multiply-handicapped students, and the higher resulting cost, is unavoidable. With few exceptions, it is the general policy of this committee that the state has a responsibility for guaranteeing only uncontrollable costs. Local choices should be financed by local taxpayers.

Local support for education is almost entirely derived from ad valorem levies. The committee needed a standard to compare local wealth and revenues, and therefore based its models on the assumption of a uniform 12% assessment ratio for real and personal property and an assessment ratio for public service property of 26.25%. For modeling purposes, the committee assumed that all valuation has been done at full market-use value. The computer models generated in the course of this study use this uniform approach to provide comparable figures for potential ad valorem collections in each district in Oklahoma.

The committee found the cost of education by modeling "optimum" schools and calculating the costs of operating these schools. Then the committee analyzed the impact of various changes, particularly in the size of the campuses, and determined the revised costs of operations. From the resulting data points that the models generated, lines or curves of best fit were calculated, creating formulas for computer modeling. Where data points did not yield good curves or lines, costs of current practice were determined and used for interpolation.

Once the cost of each district's program needs was determined, an examination was made of the resources available to districts. The committee worked out two estimates of the cost of the model program to the state, with the two estimates differing in certain assumptions. One assumed the continuation of existing law on the distribution of dedicated state revenue and the chargeability of local millages against the state aid. The second assumed that dedicated revenues would be distributed according to the formula and that all local millages would be equally chargeable. The second set of assumptions produced a significant saving to the state and is the set used throughout this report. See Appendix A for a list of the relevant constitutional and statutory provisions.

CHAPTER III

ANALYSIS OF CURRENT EDUCATION FUNDING SYSTEM

SUMMARY OF CHAPTER III

Available funding is a significant determinant of the quality of public education. High expenditure levels do not necessarily mean excellence in educational programs, but a higher level of funding creates a greater possibility of excellence than a low level does. Wealthier districts possess a recruiting tool not available to less wealthy districts that helps them attract more skilled and experienced teachers. Districts with abundant resources can provide special courses, small class sizes, better school facilities, expensive equipment such as computers, and other services that poorer districts cannot afford.

This chapter examines the disparities in the funding available to Oklahoma school districts. The disparities are great. The wealthiest district has more than ten times as much to spend per student as measured by Average Daily Membership (ADM) as the poorest district. As this chapter shows, some of the disparity in funding is due to local assessment practices, but much more is due to the simple fact that districts' tax bases differ greatly.

State aid to schools exists in part to remedy the disparities caused by differing local tax bases. This chapter summarizes the means by which state aid is divided among districts and the levels of operating income that result from the combination of state and local funding for schools. It demonstrates that the existing system of apportioning state appropriations and dedicated revenues in some cases widens the inequities that originate in unequal tax bases in the districts.

This chapter examines the following subjects:

A. Distribution of local resources.
B. Distribution of state resources.
C. Distribution of federal aid.
D. Distribution of total expenditures.
E. Programmatic implications.

All figures in this chapter are for the 1984-85 school year, FY-85.

A. DISTRIBUTION OF LOCAL RESOURCES

The ability to raise revenue locally for education differs greatly among Oklahoma school districts. Part of the difference in ability springs from different assessment practices, but the variation is largely the result of the property base on which districts can levy taxes. Every district levies the maximum allowable millage for general fund purposes of 35 mills. Each district also receives 4 mills levied county wide.

Assessment practices could, in theory, create a difference of 67% in valuation of two counties with equal market-use values of property as a result of the Poulos III case (OKLA., 646 P.2nd 1269 (1982)). It permits property to be assessed with a 6% range of the established ratio, currently 12%. This allows a 67% spread because 15% is two-thirds more than 9%. In actual practice, only a few counties assess at more than 12% of market-use value and none over 13%. The resulting variation is only slightly over 40%.

On the other hand, the district in Oklahoma with the poorest local tax base has an assessed value per pupil of slightly over $1,000, the wealthiest possesses more than $340,000 per pupil in assessed value--a range of over 30,000%.

Table 1 shows the range of taxable value that would be available even if every district assessed at the same level (a 12% assessment ratio is used).

TABLE 1

TAXABLE VALUES AT 12% ASSESSMENT RATIOS

% of Districts at This Taxable Value Level or Below	Taxable Value Per Student at 12% Assessment Ratio	$ Per Student 35 Mills Would Raise	# of Students at This Value or Less
Lowest District	$ 1,294	$ 45	192
10%	6,577	230	34,311
25%	9,623	337	98,904
Median District	14,817	519	257,399
75%	25,336	887	408,767
90%	43,031	1,506	572,798
Highest District	343,055	12,007	584,442
Average (Mean)	$ 19,635	$ 687	360,805

Even ignoring the extremes, the range from the 10th percentile of wealth to the 90th percentile is 554%. Over 60% of the students in Oklahoma are in districts with less than average taxable wealth.

School districts generate a small amount of additional local income from sources such as interest on investments, sale of property or rental fees. The total amount of such income is only $56.6 million, representing only 16% of total local income.

B. DISTRIBUTION OF STATE RESOURCES

Distribution of Dedicated Income

The state returns various taxes and fees to the district or the county where they were generated for allocation to school districts on a per student basis. There is great variation in the amounts districts receive from these sources. Many districts have little in the way of resources covered by these taxes and fees, and dependent school districts receive no allocation from their county's auto license fees or gross production taxes.

Table 2 shows the range of dedicated revenue per student allocated directly to the districts. Table 3 shows the range of district income per student from dedicated taxes distributed to the counties.

TABLE 2

DEDICATED REVENUE DISTRIBUTED TO DISTRICTS

% of Districts at This Revenue Level or Below	Dedicated Tax Revenue Distributed Directly to District, in $ / ADM	# Of Students At This Value Or Below
Lowest District	$ 0	189,856
10%	3	261,188
25%	16	400,811
Median District	42	486,733
75%	82	552,014
90%	160	574,874
Highest District	572	584,442
Average (Mean)	$ 21	428,115

Thirty-six districts with about 1/3 of the students in Oklahoma received no money from this source; 1/2 of the students are in districts which receive $6 per student or less.

TABLE 3

DEDICATED REVENUE DISTRIBUTED TO COUNTIES

% Of Districts at This Revenue Level Or Below	Dedicated Tax Revenue Distributed To The County And Allocated To Districts On A Per Student Basis, in $ / ADM	# Of Students At This Value Or Below
Lowest District	$ 30	34
10%	50	10,970
25%	77	21,405
Median District	256	156,598
75%	382	486,588
90%	692	558,478
Highest District	2,891	584,442
Average (Mean)	$ 334	352,331

In this category, 1/2 of the students are in districts which receive $305 per ADM or less. The range from the 10th percentile to the 90th is 1,284%.

State Aid

The state provides assistance to school districts through three formulas: Foundation Aid, Transportation Supplement Aid, and Incentive Aid. These constitute what may be thought of as basic financial support for public schools. They make up the inability of local resources to fully fund a quality education program by providing relatively more state funding to poorer districts, per student, than to richer districts.

Districts also receive state aid through several categorical line-item grants and through various "hold-harmless" provisions that act to protect districts against a loss of state funding in comparison with the previous year's funding. Categorical aid plus hold-harmless funding is 13.7% of total state aid to local districts, and in many districts it exceeds the amount to which the district would be entitled under the formulas.

Table 4 shows the range of total state assistance received by districts. It includes both the formula sources described in the last paragraph, and non-formula sources described further on in this chapter.

TABLE 4

DISTRICT TOTAL STATE AID

% of Districts at This State Aid Level or Below	State Aid From All Sources, in $ / ADM	# of Students at This Value or Below
Lowest District	$ 714	134
10%	1,003	164,051
25%	1,145	303,398
Median District	1,340	448,710
75%	1,598	551,584
90%	1,845	575,788
Highest District	5,733	584,442
Average (Mean)	$ 1,170	349,945

One-half of all students are in districts which receive $1,124 or less per student in state aid.

State Aid Hold-Harmless

The "hold-harmless" or allocation guarantee was intended, when created for FY-82, to protect districts against a loss of state funding as the state shifted to a revised funding formula. In effect, it then worked to guarantee that no district would receive less state funding under the new formula than it would have received for FY-82 if the old formula had remained in force. In FY-82, the hold-harmless provisions applied to 178 school districts, and the new formula without hold-harmless to 437. The broad application of hold-harmless prevented the new formula from providing the funding level the legislature had envisioned for the other districts, because it absorbed $16.7 million of the $20.7 million in new money for FY-82.

Hold-harmless was originally intended as a transitional funding mechanism, but it has become a continuing feature of state educational funding in Oklahoma. It began as a guarantee of a fixed level of funding but has become a cumulative "floating" guarantee. For FY-83 it was enlarged to include teacher and support personnel salary increases which had been paid across-the-board in FY-82. For FY-86 the hold-harmless provision cost $66.1 million of the $785 million Financial Support of Public Schools line item. Retention and expansion of the initial hold-harmless level has in actuality frozen the pupil count at the 1978-79 level and taxable wealth at the 1980

level as the bases on which districts' state aid is calculated. School districts with declining enrollment or increasing wealth benefit substantially. Subsequent effects of funding reductions have reduced hold-harmless guarantees, as well as funding levels for non-hold harmless districts.

Table 5 shows the range in aid received through hold-harmless formulas.

TABLE 5

DISTRICT STATE AID RECEIVED THROUGH HOLD-HARMLESS

% of Districts at This Hold-Harmless Level or Below	State Aid from Hold-Harmless Provisions, in $ / ADM	# of Students at This Value or Below
Lowest District	$ 0	
10%	0	
25%	0	
Median District	0	350,655
75%	307	526,053
90%	904	570,942
Highest District	4840	584,442
Average (Mean)	$ 113	395,093

362 districts representing 350,655 students receive no money from hold-harmless provisions.

State Categorical Appropriations

Close to $50 million or 5.8% of the state money appropriated to schools is earmarked for special purposes and is not subject to formula distribution. Funds are line-itemed for different purposes, such as Textbook Purchases, Supplementary Textbooks and Materials, and Staff Development. Textbook Purchases funding provides for the purchase of books on the state adoption list, in accordance with a constitutional requirement. Funds for Supplementary Textbooks and Materials do not have to be spent on books on the state list. Funding for the three purposes named in this paragraph are allocated statewide on the basis of average daily attendance without regard to district wealth.

A large share of line-item funding reimburses districts for the cost of services mandated by the state. Teacher Consultant Stipends, Class Size Reduction Aid and funding for Education of Homebound Children fall into this category. School Lunch expenditures for children from low income families are funded through line-items for programs and federal matching purposes. The Transportation Grant uses the same distributional formula as the Transportation Supplement in the line-item for Financial Support of Public Schools, but is not subject to hold-harmless provisions. It provides about one-third or $6 million of the state funding for transportation.

One of the most important purposes of line-item funding is "initiative." Competitive grant's are used to provide seed money to encourage districts to

participate in certain programs. The programs are Library Resources, Early Childhood Education, Alternative Education, Community Education, Career Education and School/Community Arts-In-Education. Conditions for funding usually include effort and need. Small School Cooperatives and Instructional Computer Services are also funded on a competitive basis.

Separate funding for Psychometric Services is provided to some large school districts. Most districts are served through the twenty Regional Education Service Centers. Supplemental state funding is provided for County Superintendents' Salaries. Separate support is directed to special programs such as the Oklahoma Science and Engineering Fair.

Over the past ten years the number of line-items has increased from six to twenty (not counting salary increases and supplemental general funding) and grown in amount from about $10 million to $48 million, although the amount as a percentage of total budget has declined. Table 4, above, includes all amounts granted through line-items in the figures for district total state aid.

C. DISTRIBUTION OF FEDERAL AID

The special conditions that govern the use of federal aid to schools have constrained the committee from considering it in the context of measuring the distribution of revenues among school districts. This section is included only for informational purposes. Federal funding is excluded from all the tables in this chapter.

In FY-85 federal funding made up only 7% of total revenue for Oklahoma school districts. Its distribution varies widely, with a handful of districts receiving no federal aid while one district receives about $1,900 per student. One-half of the districts receive $156 per ADM or less and three-fourths receive $300 per ADM or less.

Federal law treats federal aid as a supplement to state and local efforts to provide for higher costs for target populations or types of districts. Thus states cannot use federal funds to supplant local effort or state assistance. Federal aid cannot be counted as a source of local revenue in state aid formulas.

There is an exception to this rule in the case of impact aid in states whose aid formulas meet stringent equalization tests. The committee felt that it is unlikely that any system adopted in Oklahoma will meet those tests, at least for the next fiscal year. Therefore, the committee adopted the policy of analyzing state and local revenue impact only.

D. DISTRIBUTION OF TOTAL EXPENDITURES

Having examined the various sources of school district income, it is time to examine the overall picture. There is a very wide range of income among

the districts. The range is summarized in Table 6, which shows the distribution of total operating revenues from local and state sources. It excludes revenue from federal sources.

TABLE 6

OPERATING INCOME FROM LOCAL AND STATE SOURCES

% of Districts at This Income Level or Below	Local and Dedicated + State Income in $ / ADM	# of Students at This Value or Below
Lowest District	$ 1,777	475
10%	2,010	83,474
25%	2,123	245,326
Median District	2,328	427,069
75%	2,816	546,648
90%	3,825	571,943
Highest District	18,799	584,442
Average (Mean)	$ 2,297	401,613

One half of the students are in districts w n less than $2,170 in total operating revenue.

The variation shown in Table 6 is extreme. Some variation is to be expected; some is in fact built into the state formulas, as, for example, funding of transportation, which will differ as districts differ in population density. But, as will be shown, the costs of operating school districts do not explain the range seen in Table 6. The actual reasons for the wide variation are laid out in Table 7.

TABLE 7

OPERATING INCOME FROM LOCAL AND STATE SOURCES

Decile	Local Revenue Per ADM	Dedicated Income Per ADM	State Aid Per ADM	Total State/Local Revenue Per ADM	Hold-Harmless Per ADM	Average Taxable Wealth* Per Pupil
1	$ 313	$ 205	$ 1642	$ 2161	$ 6	$ 5,501
2	382	257	1444	2084	1	7,870
3	457	357	1300	2116	12	9,578
4	507	303	1320	2132	17	11,566
5	634	351	1182	2168	18	13,761
6	680	361	1125	2167	30	16,009
7	846	412	1013	2273	92	19,605
8	915	373	975	2264	132	27,301
9	1,260	379	1026	2666	342	35,658
10	2,493	757	1274	4525	1188	66,487

* Adjusted 12% Assessment Ratio

Table 7 ranks the districts by wealth and divides them into deciles, equal tenths, ranging from the poorest to the wealthiest in taxable wealth per pupil. Thus, as Oklahoma has 613 school districts, the first decile includes the 61 poorest districts in Oklahoma, and the tenth decile includes the 61 wealthiest. The table shows that total state/local revenue per ADM is fairly similar for the poorest 80% of districts, the first eight deciles, regardless of the average wealth of the districts. But in deciles 9 and 10, the wealthiest two deciles, the total state/local revenue per ADM increases sharply.

The greater amounts of dedicated income and hold-harmless income per ADM contribute to the increase. The Foundation and Incentive Aid formulas adjust for variations in local and dedicated resources by subtracting them from calculations of program cost. This is an equalizing process. The hold-harmless formulas and dedicated income work in the opposite direction and, in practice, increase disparities that exist because of differences in district wealth at the upper end of the scale of wealth.

This is clearly evident in Decile 10, the wealthiest, where local revenue alone exceeds total revenue for any of the first eight deciles. It is quite possible that in the districts included in Decile 10, local revenue may exceed basic program costs. The existing system for apportioning state funds to districts adds even more to local funds. In the absence of a recapture provision, the existing state funding provisions and the existence of dedicated revenue widen the inequality of resources among districts.

Some of this may also occur in Decile 9. A district with $1500 per student in local revenue may also be receiving $1000 or more per student in dedicated income. Thus, even if the district were to receive no other state aid, it would still have available $200-400 in excess of that available to the average district in the lower eight deciles.

If some or all of this excess accumulation were available for distribution through the formulas, the general level of support to all other districts could be increased. In essence, state revenues transferred to the wealthiest two deciles of districts are "lost" to the system, or at least lost to poorer districts which need additional funding to come closer to equalizing expenditure.

E. PROGRAMMATIC IMPLICATIONS

Differences in money available do not translate directly into good vs. bad educational programs. Nonetheless, teachers with skills, experience, and training are attracted to districts in part by salary levels above statutory minimums. Differing resources can greatly affect the range of programs offered, the level of individual attention paid to students, the career options open to teachers and other professionals, and many other elements of the educational process.

One Oklahoma high school has 8 teachers and 24 students--virtually a tutorial program. Another Oklahoma high school has only 4 teachers for 52 students. No level of professional dedication can equalize the difference in the opportunities the two schools can offer. One elementary school with 4 teachers has 33 students; another with the same number of teachers has 94 students. At the very least, individual attention is much less in the latter instance.

In elementary schools, the average pupil/teacher ratio varies from less than 7 students per teacher to more than 25. In middle schools, the range is from an average of less than 10/1 up to 28/1. For high schools, the range is from 3/1 up to more than 32/1. All told, districts in Oklahoma range in ratio of students to <u>all</u> certified personnel (including principals, counselors, etc.) from a low of 5.2/1 to a high of 21.5/1.

The range of experience and advanced training of teachers also varies widely among districts. For experience, the statewide average is 10 to 11 years for those with bachelor's degrees, and 6 to 7 years experience for those with master's degrees. Individual districts' experience can be far different from the average. One district's teachers have an average of two to three years experience with a bachelor's degree. At the high end, one district's teachers with master's degrees, or equivalent, average 15 years of experience.

Such disparities are partially explained by salary levels. Skilled and well-trained teachers are in part attracted and held by higher salaries. Districts have the option to attract such teachers by "enriching" the state-mandated minimum salary, or, in plain English, by paying more than the state requires.

The level of enrichment over minimum salary averages 18.4%. However, many districts are paying only the required minimums while some districts are enriching the minimum salaries by more than 40% of the base. Table 10 in chapter 4 shows the state mandated minimum salary schedule.

Abundant resources not only allow some districts to attract the well-trained and experienced teachers other districts have to forego, but may also allow them to hire counselors, curriculum specialists, special duty teachers and others who can improve educational offerings. Wealthier districts may purchase additional instructional materials, computers, lab equipment and library resources that are out of the reach of their poor neighbors.

Alternatively or in addition to the above, wealthier districts may lower taxes or spend money on high administrative overhead or non-essential expenses. To a great extent, such decisions are a local matter. But to the extent that state funding produces inequitable expenditure, adding wealth to the wealthy, or allowing wealthy districts to tax less, it is a subject for state concern. The purpose of this chapter has been to present the facts of the case, in order to clarify discussion.

CHAPTER IV

COST OF QUALITY EDUCATION IN OKLAHOMA

SUMMARY OF CHAPTER IV

Chapter III demonstrated that there are significant disparities in funding among Oklahoma school districts. Chapter IV designs measures of equity to make it possible to see what programmatic needs exist in school districts, recommends changes in various funding mechanisms, and calculates the total expenditure needed to provide high quality education for all students in Oklahoma.

The first task presented here is the design of schools with the optimum size of enrollment, student/teacher ratio, auxiliary professional services, and other operating expenditures. These models are the foundation for all that follows in this report. The Special Joint Committee found that the most cost-efficient sizes for schools are as follows:

K - Grade 5 Elementary School	470 students
Middle School (Grades 6 - 8)	700 students
Four-year High School	1,200 students

Since many districts lack the population to provide schools with optimum enrollments, the committee also devised models of schools with enrollments as small as 50 elementary or middle students and 75 high school students which would meet the student/teacher ratios and other measures of a desirable level of education that the committee determined.

The committee then examined the process of weighting formulas for school funding to provide for the needs of special students. It found that the present level of available funds for special education students appears to exceed present expenditures by a substantial amount. For other types of special students, such as bilingual, gifted and talented, and economically disadvantaged, funds are not adequate to meet needs. It recommends a revised system of weights for determining state assistance for such students, based on instructional arrangements rather than on types of handicap. The Committee recommends expenditures at a level higher than the present level, but still below the amount now available.

The committee also found methods to measure variations in the cost of education among districts due to uncontrollable levels of expense for teachers' salaries. Teachers' experience and training, the competition of other employers for the services of people whom districts could employ, and the competition among districts for teachers force districts to offer higher salaries than the absolute minimum in order to retain a teaching force adequate for district needs. The state funding formula does not adequately take these uncontrollable sources of district differentials in salary costs into consideration.

Some districts may therefore be forced to make decisions that injure the quality of education in their schools in order to meet uncontrollable salary needs. Such decisions can include increasing class size, employing less experienced or trained teachers over those better qualified, or practicing severe economies in other program aspects. To the extent that the state funding formulas do not take such uncontrollable salary costs into account, the formulas contain incentives to reduce the quality of education. The committee developed mechanisms to adjust the basic funding formula to resolve the problem.

Finally this chapter examines the current system for apportioning funds for student transportation. The committee found the present system in need of substantial reform and makes recommendations accordingly.

The full program set out in this chapter would cost Oklahomans about $2.1 billion annually. Some additional district funding is projected (the recommendation is in Chapter V) but the cost of the state share would have to increase from $1.06 billion to $1.6 billion annually. Because such an increase in funding may not be available, Chapter VI devises a less expensive set of models. Those presented in this chapter, however, stand as the goal to which Oklahomans must aspire.

This chapter examines the following subjects:

A. Optimum sized regular programs.
B. Small schools regular programs.
C. Special education program weights.
D. Other special pupils.
E. Teacher salary differences: experience and training.
F. District variances and market conditions.
G. Transportation funding.
H. Transportation recommendations.

Historical data presented in this chapter are based on 1984-85 (FY-85) figures.

The General Methodology Followed in This Chapter

To guarantee that educational expenditures buy equivalent services in all districts, the committee sought a formula to adjust for uncontrollable costs. There are three ways commonly used to find such a formula.

(1) a cost analysis of currently existing program components in a random sample of school districts.

(2) a cost analysis of all special programs in a stratified sample of school districts with the difference between special program costs and total current operations expenditures being accepted as regular program costs.

(3) an expert panel utilizing "best judgment" in the identification of the resources needed to provide the regular and special programs and thereafter estimating the cost.

Resources and available time caused the Special Joint Committee to select the third method.

A. OPTIMUM SIZED REGULAR PROGRAMS

The committee selected optimum sizes for elementary, middle and high school models. Optimum was defined as the most cost-efficient size for providing a quality program; a smaller size would create diseconomies of scale and a larger size would require extra layers of administration and other costs that would increase costs per student. It should be noted the diseconomies associated with large school campuses are not montarily significant; the Committee chose not to take these cost into consideration. The optimum sizes determined were a grades K-5 elementary school of 470 students, a grades 6-8 middle school of 700 students, and a four-year high school of 1,200 students. Charts 1 - 3 on the following pages show the personnel needs and required costs of such schools and calculate the cost per student when other operating costs are added.

Notes on Charts 1 through 3

The following models show the personnel and other operating costs of elementary, middle, and high schools with optimum enrollment and staffing patterns. The lower part of each chart calculates costs per FTE student.

The last figure in the upper part of each chart, Total Personnel salary and benefits, is divided by the number of FTE students at the school model to reach an average, labelled "Total Personnel" in the lower part of each chart. Other per-student expenditure needs are then added, including supplies/materials/minor capital outlay, textbooks, co-curricular, and indirect costs. Minor capital outlay was defined by the committee to be those items which would normally appear on a campus budget. Indirect costs were defined to be the amount per FTE student necessary to provide all of the district-wide services which would not normally appear on a campus-based budget, e.g., utilities, insurance, and central office-based personnel. Indirect costs were determined to be 25% of building-based costs.

Cost of Implementing the Models

The resulting total cost of the regular program models is nearly $1.1 billion. Since this is close to the current level of about $1.4 billion in total expenditures even without accounting for the formula adjusted costs, it can be presumed that many districts are not currently staffing at optimum levels.

Note on the Methodology for Calculating Personnel Costs

The major component of the costs shown in the tables is personnel costs. The Special Joint Committee examined various options before settling on the figures used in the charts. The committee examined the possibility of setting a minimum starting salary for teachers of $20,000, a figure felt to be competitive with other employers. The associated salary schedule would have doubled that amount over 15 years of service. Although the committee continued to feel that such a starting level and schedule represent an appropriate state goal, they recognize using such figures would initially add $400 million a year in needed school funding, an amount currently unavailable.

For those reasons, the models utilize a teacher salary level of $15,060, the existing minimum for a beginning teacher with a bachelor's degree at the time of this study (1985-86), and this level is used in all the subsequent models. No allowance is made for experience or training because this chapter provides separate formulas to offset costs related to experience, training and market factors.

There is no comparable minimum wage schedule for non-teaching personnel. Therefore the charts base salaries for professionals other than teachers on averages of actual 1984-85 salaries increased by $2,400 to account for the raise for 1985-86. Non-professional personnel costs were calculated at the statewide average for 1984-85 plus an 8% increase to reach the 1985-86 levels.

Since the resulting figures for non-teaching personnel had not been computed in a way comparable to those for teachers, an additional factor was needed to make the salaries comparable. The factor used was a reduction of salaries by the average percentage of teacher salary enrichment; this resulted in salary figures at a level that would be likely in districts that paid teachers at the minimum level. The adjustment makes it possible to apply a market wage factor to non-teachers' salaries.

A factor of 15% of salary was used to calculate benefits. Total Personnel cost, including benefits, is indicated for each of the following models.

Charts 1 - 3 show the determination of the minimum cost of a regular program student. [Text resumes on page 22]

CHART #1

COST OF REGULAR EDUCATION
ELEMENTARY MODEL I

470 Pupil Elementary K*-5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	20**	$ 15,060	$ 301,200
Special Subject Teachers			
Music	1	15,060	15,060
Art	1	15,060	15,060
P.E.	1	15,060	15,060
Principals	1	27,432	27,432
Counselors	1	21,532	21,532
Librarians	1	18,509	18,509
Secretaries	1	10,967	10,967
Teacher Aides	2	6,716	13,433
Office Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	2	11,729	23,458
	Total Salaries		$ 481,387
	+15% for benefits		72,208
	Total Personnel		$ 553,595

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,287
Supplies/Materials	65
Textbooks	30
Indirect Cost***	346
Total Current Operating	$ 1,728

* Half-day Kindergarten results in 430 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #2

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL I

700 Pupil Middle School, Grades 6,7, and 8

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	33*	$ 15,060	$ 496,980
Principals	1	29,167	29,167
Asst. Principals	2	28,069	56,138
Counselors	3	21,532	64,596
Librarians	1	18,509	18,509
Consultant for Computer Applications	1	27,096	27,096
Nurses	1	17,628	17,628
Secretaries	1	10,967	10,967
Teacher Aides	3	6,716	20,148
Library Aides	2	6,716	13,432
Clerks	2	6,716	13,432
Head Custodians	1	12,960	12,960
Custodians	3	11,729	35,187
Total Salaries			$ 816,240
+15% for benefits			122,436
Total Personnel			$ 938,676

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,341
Supplies/Materials	75
Textbooks	40
Co-curricular	50
Indirect Cost**	377
Total Current Operating	$ 1,883

* 1 to 25 with 7 period day and teachers teaching 6 of 7 periods, a 6 period day would cost $36 more per FTE

** 25% of other per FTE costs for providing district-wide leadership and services

CHART #3

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL I

1,200 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	72*	$ 15,060	$ 1,084,320
Principals	1	28,120	28,120
Asst. Principals	3	28,471	85,413
Counselors	4	21,532	86,128
Librarians	2	18,509	37,018
Consultant for Computer Applications	1	27,096	27,096
Registrars	1	12,198	12,198
Nurses	1	17,628	17,628
Secretaries	1	10,967	10,967
Counselor's Secretaries	1	10,967	10,967
Finance Clerks	1	10,800	10,800
Teacher Aides	5	6,716	33,580
Library Aides	3	6,716	20,148
Clerks	3	6,716	20,148
Head Custodians	2	12,960	25,920
Custodians	6	11,729	70,374
Total Salaries			$ 1,580,825
+15% for benefits			237,124
Total Personnel			$ 1,817,949

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,515
Supplies/Materials	100
Textbooks	60
Co-curricular	65
Indirect Cost**	431
Total Current Operating	$ 2,171

* 1 to 20 with 6 period day and all teachers teaching 5 of 6 periods

** 25% of other per FTE costs for providing district-wide leadership and services

B. SMALL SCHOOLS: REGULAR PROGRAMS

Some Oklahoma districts lack the number of students required to meet the optimum school sizes shown in charts 1 through 3. Therefore the Special Joint Committee established the cost of programs of equivalent quality for students in schools that are smaller than the optimum. As expected, providing educational opportunities at the optimum level when campus enrollment is below optimum size cost more per student. Charts 4 through 12 demonstrate this for three elementary schools, three middle schools, and three high schools with enrollments below the optimum.

The development of these nine models permitted computer modelling of a continuum of such schools and development of the figure of $300 million as an additional cost to the optimum model because of school enrollments below optimum levels. [Methodological Note. This modelling resulted from the observation that the distribution of costs generally suggested a hyperbolic curve of the type [A/(X+B)]+C=Y. Where data points did not yield good curves, costs of current practice were determined and used for interpolation. After solving for the various data points it was possible to adjust the model in each grade grouping by a separate curve of best fit, generating a cost of about $300 million.]

Charts 4 through 12 are on the following pages. [Text resumes on page 32]

CHART #4

COST OF REGULAR EDUCATION
ELEMENTARY MODEL II

200 Pupil Elementary K*-5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	11**	$ 15,060	$ 165,660
Special Subject Teachers			
Music	.5	15,060	7,530
Art	.5	15,060	7,530
P.E.	.5	15,060	7,530
Principals	1	27,432	27,432
Counselors	.5	21,532	10,766
Librarians	.5	18,509	9,255
Secretaries	1	10,967	10,967
Teacher Aides	.5	6,716	3,358
Library Aides	1	6,716	6,716
Office Clerks	.5	6,716	3,358
Head Custodian	1	12,960	12,960
Custodians	1	11,729	11,729
	Total Salaries		$ 284,791
	+15% for benefits		42,719
	Total Personnel		$ 327,510

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,780
Supplies/Materials	85
Textbooks	30
Indirect Cost***	474
Total Current Operating	$ 2,369

* Half-day Kindergarten results in 184 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #5

COST OF REGULAR EDUCATION
ELEMENTARY MODEL III

100 Pupil Elementary K*-5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	5**	$ 15,060	$ 75,300
Special Subject Teachers			
Music			
Art	1	15,060	15,060
P.E.			
Teaching Principal	1	21,947	21,947
Counselors	.5	21,532	10,766
Librarians	.33	18,509	6,108
Secretaries	.5	10,967	5,484
Teacher Aides	.5	6,716	3,358
Custodians	1	11,729	11,729
Total Salaries			$ 149,752
+15% for benefits			22,463
Total Personnel			$ 172,215

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,872
Supplies/Materials	100
Textbooks	30
Indirect Cost***	501
Total Current Operating	$ 2,503

* Half-day Kindergarten results in 92 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #6

COST OF REGULAR EDUCATION
ELEMENTARY MODEL IV

50 Pupil Elementary K*-5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	3**	$ 15,060	$ 45,180
Special Subject Teachers			
Music			
Art	.5	15,060	7,530
P.E.			
Teaching Principals	1	21,947	21,947
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	1	10,967	10,967
Custodians	1	11,729	11,729
Total Salaries			$ 110,567
+15% for benefits			16,585
Total Personnel			$ 127,152

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,826
Supplies/Materials	100
Textbooks	30
Indirect Cost***	739
Total Current Operating	$ 3,695

* Half-day Kindergarten results in 45 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #7

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL II

350 Pupil Model School, Grades 6, 7, and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	22.5**	$ 15,060	$ 338,850
Principals	1	29,167	29,167
Counselors	1	21,532	21,532
Librarians	1	18,509	18,509
Secretaries	1	10,967	10,967
Teacher Aides	1.5	6,716	10,074
Library Aides	.5	6,716	3,358
Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	1	11,729	11,729
Total Salaries			$ 463,862
+15% for benefits			69,579
Total Personnel			$ 533,441

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,524
Supplies/Materials	100
Textbooks	40
Co-curricular	75
Indirect Cost***	435
Total Current Operating	$ 2,174

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 18 with a 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $80 more per FTE

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #8

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL III

100 Pupil Middle School, Grades 6, 7, and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	7**	$ 15,060	$ 105,420
Principals	1	29,167	29,167
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	1	10,967	10,967
Library Aides	1	6,716	6,716
Custodians	1	11,729	11,729
	Total Salaries		$ 177,213
	+15% for benefits		26,582
	Total Personnel		$ 203,795

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,038
Supplies/Materials	125
Textbooks	40
Co-curricular	100
Indirect Cost***	576
Total Current Operating	$ 2,879

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 16 with a 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $154 more per FTE

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #9

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL IV

50 Pupil Middle School, Grades 6, 7, and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	4**	$ 15,060	$ 60,240
Teaching Principals	1	22,407	22,407
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	1	10,967	10,967
Custodians	1	11,729	11,729
	Total Salaries		$ 118,557
	+15% for benefits		17,784
	Total Personnel		$ 136,341

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost	Total Personnel	$ 2,727
	Supplies/Materials	125
	Textbooks	40
	Co-curricular	100
	Indirect Cost***	748
	Total Current Operating	$ 3,740

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 12.5 with a 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $154 more per FTE

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #10

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL II

400 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	34**	$ 15,060	$ 512,040
Principals	1	28,120	28,120
Asst. Principals	1	28,471	28,471
Counselors	2	21,532	43,064
Librarians	1	18,509	18,509
Registrar and Financial Assistants	1	12,198	12,198
Secretaries	1	10,967	10,967
Teacher Aides	2	6,716	13,432
Library Aides	1	6,716	6,716
Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	2	11,729	23,458
	Total Salaries		$ 716,651
	+15% for benefits		107,498
	Total Personnel		$ 824,149

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,060
Supplies/Materials	125
Textbooks	60
Co-curricular	95
Indirect Cost***	580
Total Current Operating	$ 2,920

* A Consultant for Computer Applications and nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 14 with 6 period day and all teachers teaching 5 of 6 periods

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #11

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL III

150 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	20**	$ 15,060	$ 301,200
Principals	1	28,120	28,120
Counselors	.5	21,532	10,766
Librarians	.5	18,509	9,255
Secretaries	1	10,967	10,967
Teacher Aides	1	6,716	6,716
Library Aides	1	6,716	6,716
Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	1	11,729	11,729
	Total Salaries		$ 405,145
	+15% for benefits		60,772
	Total Personnel		$ 465,917

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 3,106
Supplies/Materials	150
Textbooks	60
Co-curricular	125
Indirect Cost***	854
Total Current Operating	$ 4,295

* A Consultant for Computer Applications and nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 9 with 6 period day and all teachers teaching 5 of 6 periods

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #12

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL IV

75 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	10**	$ 15,060	$ 150,600
Teaching Principals	1	22,376	22,376
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	1	10,967	10,967
Teacher Aides	.33	6,716	2,216
Library Aides	.33	6,716	2,216
Clerks	.33	6,716	2,216
Custodians	1	11,729	11,729
	Total Salaries		$ 215,534
	+15% for benefits		32,330
	Total Personnel		$ 247,864

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 3,305
Supplies/Materials	150
Textbooks	60
Co-curricular	100
Indirect Cost***	904
Total Current Operating	$ 4,519

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 9 with 6 period day and all teachers teaching 5 of 6 periods

*** 25% of other per FTE costs for providing district-wide leadership and services

C. SPECIAL EDUCATION PROGRAM WEIGHTS

The Special Joint Committee's research on this issue revealed that the current process by which funds are provided for special education pupils required adjustments, but that the present sources of revenue for special education pupils generate more revenue than is being used for the intended purpose. The committee therefore primarily addressed the issue of equity of funding, and developed a revised system of weighting special education pupils for funding purposes. The committee's processes are described in detail further along in this section. Its assumptions on structuring special program funding are as follows.

a. All handicapped children, whatever their handicap--mental, physical, and/or emotional--should be provided an appropriate education in the least restrictive environment.

b. If a revenue shortfall occurs, handicapped children should suffer no more than others.

c. Related services are frequently needed for special students to maximize their opportunities within the instructional program and the cost of such services should be included in calculating basic school program cost.

d. The primary determinant of instructional program cost is the instructional arrangement prescribed in the student's Individual Education Plan--the educational prescription.

e. Aggregating student time in each of the recognized instructional arrangements into full-time equivalent students (FTE's) is the most sensitive measure of instructional need.

f. Aggregating student time in each recognized related service (excluding transportation) into FTE's is the most sensitive measure of related service need.

g. The appropriate cost per FTE of each instructional arrangement and each related service should be indexed to the level of 1.00 in a system of weights in order to establish special education's equitable share of foundation program funding.

The higher costs of instruction for special education pupils are primarily due to the costs of special teaching arrangements. Special materials and equipment account for most other additional costs. The best means to adjust such district costs is to "weight" pupils for time spent in the various instructional arrangements, using a ratio of the cost of those arrangements to the cost of the regular program.

In Oklahoma, data on special education pupils is not currently collected on the basis of instructional arrangement. The only data available record the handicapping condition of the pupil and the total enrollment of economically disadvantaged, bilingual, and gifted students. Therefore preliminary weights had to be developed on the basis of categorizing students. Discussions were held with districts' administrative staff and Education Department staff on

the instructional arrangements usually associated with these handicapping conditions. This information was then matched with cost factors drawn from studies done in Texas and other states. Where the resulting weights varied significantly from those in current law, the committee made adjustments.

Methodology for determining Special Education Program Weights

The current special education formula structure uses three methods to place money in school districts for handicapped students. First, the Foundation Aid Base Foundation Support Level regular program allotment of $910 is multiplied by each student in average daily attendance. Second, weights are assigned to students on the basis of their handicapping condition. The add-on weights are presented in Table 8 below. They are applied to the students diagnosed in each category, summed for the district, and multiplied by $910.

TABLE 8

CURRENT STATUTORY WEIGHTS FOR SPECIAL EDUCATION STUDENTS

Category	Weight
Vision Impaired	3.8
Learning Disability	.4
Hearing Impaired	2.9
Deaf and Blind	3.8
Educable Mentally Handicapped	1.3
Emotionally Disturbed	2.5
Multiple Handicapped	2.4
Physically Handicapped	1.2
Speech Impaired	.05
Trainable Mentally Handicapped	1.3
Special Education Summer Program	1.2

Third, the Incentive Aid formula provides a guaranteed amount per mill of effort above 15 mills through the 35 mill limit for current operations. Since all Oklahoma schools are now at the maximum, each district utilizes 20 mills in the formula. The guarantee for each mill per average daily membership (ADM) is now $38.69. The unweighted ADM of handicapped students is used in calculating Incentive Aid.

The sum of all of these sources of special education money is currently approximately $161,000,000. However, only the amount of money generated by the add-on weights times $910 in the Foundation Aid formula, $37,500,000, is thought to be revenue available specifically for the education of the handicapped. The common assumption, therefore, is that special education is grossly underfunded. However, these three sources of revenue produce an amount far in excess of what is currently being spent on the education of handicapped pupils.

With adequacy of funding not being the major issue, the Special Joint Committee chose to address the equity of funding. The committee adopted the assumptions listed at the beginning of this section on structuring educational funding for special education students.

The condition of the special education data base at the state level and the time available for research made it impossible to devise formula structures that are immediately and totally consistent with the desired funding assumptions. Since data were unavailable for full-time equivalent students (FTE's) grouped by instructional arrangement, a proxy for such data was created by establishing a factor for each handicapping classification and applying the factor to the number of students in a district identified as members of that classification.

Research in other states and the experience of the State Department of Education provided a basis for assigning weights to each classification of handicapped students based on typical instructional arrangements. The resulting formula is "weight times FTE proxy times the regular program allotment under the committee's recommended basic school program." (The regular program allotment is $1,674, the amount necessary per regular elementary student in the most cost efficient size elementary school.) The FTE weights and FTE proxy factors shown in Table 9 are recommended for use on an interim basis:

TABLE 9

RECOMMENDED INTERIM WEIGHTING SYSTEM

Classification	Weight	FTE Proxy Calculation**
Educable Mentally Handicapped	3.0	.55 X NIS*
Trainable Mentally Retarded	3.5	1 X NIS*
Hard of Hearing	3.0	.5 X NIS*
Deaf	5.0	1 X NIS*
Speech Impaired	7.0	.05 X NIS*
Visually Handicapped	3.5	.5 X NIS*
Emotionally Disturbed	3.5	.75 X NIS*
Orthopedically Impaired	3.5	.5 X NIS*
Other Health Impaired	5.0	1 X NIS*
Learning Disabled	3.0	.33 X NIS*
Deaf-Blind	5.0	1 X NIS*
Multi-Handicapped	5.0	1 X NIS*

* NIS = Number of Identified Students

** The FTE's of special education students would be subtracted from total district ADM used to compute the regular program cost, except for the FTE's generated by students in pull-out programs of less than three hours per day.

In computer simulations using available data, the formulas would generate approximately $144,000,000 statewide for use in direct special education instructional services, related services to handicapped students, and indirect costs associated with the special education program's fair share of utilities, insurance and general administration. A maximum of 20% of the special education revenue available should be used to provide for indirect costs. As a result $115,200,000 would be available for direct instructional services and related services.

The best available estimate of special education expenditures is less than $100,000,000. The figure is not known precisely because the data system of the State Department of Education does not provide special education program cost information. Program budgeting and accounting are not required of Oklahoma public schools. But it seems clear that the recommended formulas would increase the funding directly available to special education programs, while still costing less than current state formulas generate for handicapped children.

The interim system described above should be used for starting the basic school program payments for 1987-88 while the Department of Education conducts research on creation of a permanent formula for adjusting payments at the end of FY-88 and for use thereafter.

D. OTHER SPECIAL PUPILS

It is more difficult to use this approach in covering the higher costs of educating economically disadvantaged, bilingual, and gifted and talented students. In most instances, these children are "mainstreamed" in regular classes, and the higher costs result from additional instructional materials, the employment of instructional aides, or the smaller class sizes needed to provide individual attention.

The committee, therefore, recommends the application of the following weights for these programs to the number of identified students, with no FTE calculation or subtractout. The weights are:

Economically Disadvantaged	.4
Bilingual or English as Second Language	.5
Gifted and Talented	.5

E. TEACHER SALARY DIFFERENCES: EXPERIENCE AND TRAINING

Introduction to Sections E and F

This section and the following section discuss two complicated issues that concern the relationship between the state funding formula and teachers' salaries. The actual level of teachers' salaries in any given district involves a number of circumstances. The state mandates a schedule of minimum salaries that provides higher salaries for higher levels of training and years of experience. The statutory minimums are shown in Table 10:

TABLE 10

MINIMUM SALARY SCHEDULE

Years of Experience	Bachelors Degree	Master's Degree	Doctor's Degree
0	$ 15,060	$ 16,166	$ 17,272
1	16,221	17,327	18,433
2	16,553	17,659	18,765
3	16,774	17,880	18,986
4	17,106	18,212	19,318
5	17,438	18,544	19,650
6	17,659	18,765	19,871
7	17,991	19,097	20,203
8	18,212	19,318	20,535
9	18,544	19,650	20,756
10	18,765	19,871	20,977
11	19,097	20,203	21,309
12	19,318	20,424	21,530
13	19,650	20,756	21,862
14	19,761	20,867	21,973
15	20,092	21,198	22,304

This table shows the minimum salary schedule enacted in 1985. Computations of funding requirements throughout this report are based on this salary schedule. All computations of the distribution of costs among districts are based on actual cost distributions for the school year 1984-85 (FY-85) because later data were not available at the time the analysis for this report was done.

Districts are free to enrich (pay more than) the minimum. Districts' decisions to do so are undoubtedly based on many considerations. These two sections, however, focus on two important factors in enrichment, which the Special Joint Committee found to merit careful attention. The two factors at present distort district decisions on alloting money for teachers' salaries and other operating expenditures. Without legislative approval of the recommendations made in these two sections, these factors will continue to produce differences in educational quality among districts. The present concern is to recognize the way in which the interaction of the present funding formula and the mandated salary schedule distort districts' decisions.

Teacher Salary Differences: Experience and Training

The impact of the minimum salary schedule is a primary uncontrollable cost for school districts. Table 10 shows the possible variations. The range from the minimum for a beginning teacher with a bachelor's degree to a teacher with fifteen or more years' experience and a doctorate is over 48%.

The actual range of the impact is large. One district employs eight teachers whose experience has been so limited that the district is required to pay them less than 11% over beginning rates. Another district employs five teachers whose experience and training entitle them to payments 40% over the

minimum. The statewide average is about 26%. The statutory minimum salary provisions require payments of over $120 million more than paying everyone only the beginning salary level of $15,060 would cost.

The problem addressed here is that two districts with student loads and teaching staffs of identical size could have teacher salary costs of very different amounts. District A, with a staff of mostly experienced teachers, would pay much more in salary than District B with a largely inexperienced staff. If the two districts have equal tax bases, District A would have much less for expenditures other than teachers' salaries than District B; the current state formula for salary incentive aid would not give District A enough additional money to cover its additional salary costs because the formula does not fully take such costs into account.

Districts whose expenditures thus are skewed toward salaries, such as District A, may have to enlarge class size, buy fewer instructional materials, or find other economies. An alternative to economies in non-teaching expenditure is to prefer inexperienced personnel to well-trained and experienced personnel. Thus the present funding mechanism contains a disincentive to the retention of highly qualified and experienced personnel because it does not fully provide for the variable degrees of experience and training among districts' teachers.

It can be argued that the impact of the salary schedule is a controllable cost and that its impact should be locally financed. The Special Joint Committee rejected this approach because it felt that quality education is the goal of the state funding formula, and that therefore the formula should contain no disincentives to quality, even if the disincentive can, in some cases, be made up by local effort. Therefore the committee devised a formula, the "Experienced Teacher Index", to use in adjusting grants to common schools to mitigate the impact of this cost.

The formula establishes the ratio of the sum of the minimum salaries required for each teacher in a district (omitting all enrichment) to the amount that would be required if all teachers were paid $15,060. The resulting "Experienced Teacher Index", can be applied to a share of the regular program allotment equal to the proportion that all teachers' salaries statewide are of current non-transportation operating costs. This share is 51%. The formula is as follows:

$$\frac{\text{District Minimum Salary Requirement}}{\text{(State Minimum)(Number of Teachers)}} = \text{Experienced Teacher Index (ETI)}$$

$$\text{Regular Program Allotment} \times [(.51 \times \text{ETI}) + .49]$$

$$= \text{Experience Adjusted Program Cost}$$

F. DISTRICT VARIANCES AND MARKET CONDITIONS

A number of the costs school districts face are determined by market conditions, not by law. These include utilities, insurance, and salaries for professional employees as well as non-professional employees.

Impact of the Employment Market on Districts' Salary Levels

Districts that are in a highly competitive employment market suffer from the same distortion of expenditure decisions discussed in Section E of this chapter in connection with experience factors. The existing formula draws no distinction between districts in which teachers' salaries are inflated by competition and those which can attract teachers of equivalent quality with lower salaries because of less competition. The Special Joint Committee recommends a formula adjustment to deal with the adverse impact of such competition.

The working assumption of the discussion that follows is that school districts are not only in competition with each other for teachers, but that they compete with other employers. This is not common wisdom, but it is present reality. In the past, the predominence of women among teachers and limited job opportunities for women in many other industries helped limit competition for teachers and keep salaries low. The increase of employment opportunities for women and the generally increasing number of informational and knowledge-oriented jobs in all areas of commercial and industrial activity have forced competition among school districts and other employers.

Analysis of salary competition is limited by the same data and data processing shortcomings that curtailed analysis of utility and insurance costs. However, a useful, if primitive, model can be constructed. It makes the assumption set out in the previous paragraph, plus the assumption that all the school districts in a given area are jointly in competition with other industry in the same area. The districts' wage scales will reflect the competition individually and in aggregate. Therefore, the degree to which a district's neighbors enrich salary more than they are required to by law is the uncontrollable factor driving district salary costs over and above the experience and training factor.

Uncontrollable salary enrichment is the amount a district is compelled to pay a minimally qualified person above the mandated minimum for that person in order to meet the competition from other industry. This is uncontrollable because a district must do this to have enough teachers. Controllable enrichment is the further amount paid to give a district more choice among candidates. The following analysis is concerned with uncontrollable enrichment--the amounts that districts have to add to salaries to match their competitors.

The biggest problem with determining what uncontrollable enrichment costs are for a district is defining the market. After considering various possibilities, the Special Joint Committee found the most feasible definition to be the county. The Department of Education computer can identify districts by county and easily aggregate the data.

The data on salaries in districts and the aggregate county data can be used to create an index that compares county salaries overall with salaries in each district in the county. The formula to create such an index is:

$$\frac{\text{County Actual Salaries} - \text{District Actual Salaries}}{\text{County Minimum Salaries} - \text{District Minimum Salaries}}$$

In the formula, "minimum salaries" is the sum of the minimum salary required to be paid each teacher under the salary schedule, due to experience and education - the same value as the numerator in the Experienced Teacher index. Values for the district being compared are subtracted to prevent them from affecting the aggregate county ratio. The ratio that results from the computation is the percentage by which the surrounding districts in the county "enrich" salaries over statutory minimum, the "competition factor" for any district for which the ratio is developed.

There are four major difficulties with this approach. The first is that many districts are located in more than one county. This study used the "home county" assignment established by the Education Department for the ratio for any given district. Other possibilities would be to use the sum of values for all counties in which the district is located, to use all counties in which the district is located adjusted by the percentage of the district in each county, or to use the "bordering district" method.

The second problem occurs when there are only two or three districts within a county. The potential problem of collusion together with the lack of sufficient districts to buffer the impact of extreme variance suggests a different approach. Since there are only three counties with two districts and two counties with three, the "bordering district" method can be applied.

The third problem is the arbitrary impact of county lines. The method used here does not allow for cases in which neighboring and highly competitive districts are divided by a county line. The problem particularly exists for districts bordering on major urban districts or counties. Major urban districts tend to enrich significantly, and to employ so many teachers that they could "clean out" their neighbors. The methodological problem could be resolved by allowing districts that border the major urban districts or counties, Tulsa and Oklahoma/Oklahoma City, to combine the values of both their county and the neighboring urban county in calculating their index.

The final problem is the most difficult. It is the additional competition among school districts of comparable size. Studies of other states show that the size of a district's student population is usually the most significant factor in determining salary enrichment costs. In the absence of a statistical package, the impact of size was approximated by ranking the districts in Oklahoma from smallest to largest and dividing them into quartiles of students, that is, so that each of the four groupings contained approximately one-fourth of the students in the state.

It was clear from this analysis that size of district is important in Oklahoma. The percent of enrichment by quartile increased by at least 5% of minimum salary as the size of districts within the quartile increased. This fourth problem therefore is significant enough that the ratio described above must be adjusted by the use of a second competition factor based on the size of districts. The same formula structure can be used:

$$\frac{\text{Quartile Actual Salary} - \text{District Actual Salary}}{\text{Quartile Minimum Salary} - \text{District Minimum Salary}}$$

The committee recommends that an index be constructed by averaging this size competition factor with the previous factor. The index should then be applied to the percentage of district non-transportation operating costs represented by salaries and benefits for all personnel, which currently is 81.1%. This generates a cost to the model of about $130 million.

District Variances in Utility and Insurance Costs

While there probably is some degree of market variation around Oklahoma in utility and insurance costs, an analysis of current expenditure data revealed no readily identifiable pattern. Districts of similar size within the same county yielded widely varying expenditures, figured either as a percentage of operating budget or in dollars per student. Apparently, controllable factors that correlate to local wealth, such as size, age and quality of buildings, the decision to air-condition, and so on, have as great an impact as market factors.

These factors could be controlled by using a regression analysis, but the Education Department computer is not equipped with a statistical analysis package. Since no other computer system currently can access the data base, the committee was forced to abandon any further analysis of the impact of these two factors. However, it should be noted that, with a few extreme exceptions, the percentage of budget affected by utility and insurance costs varies over a relatively narrow range, and to the extent that it is size-related, is perhaps already accounted for by the indirect cost portion of the small campus model.

G. TRANSPORTATION FUNDING

The Special Joint Committee found that inequities result from the present formula for dividing state support for student transportation costs among districts. This and the following section of this chapter review the issues, summarize the committee's development of a new formula, and list recommendations for legislative action.

Districts spent $66 million on student transportation in 1984-85, excluding student activity expenses and capital costs. The state formulas provided $27 million of that amount. The state does not provide funding for fleet growth or bus replacement.

Students who live 1.5 miles or more by commonly traveled road from their school are counted in the computation of state support. Other students may be transported, but are not counted. The state formula does not provide support for kindergarten students transported to or from school at mid-day, despite the prevalence of half-day kindergarten sessions.

Current formula calculations combine measures of lineal and areal density of districts to determine the amount of support for each eligible student. Areal density is the number of students per square mile; linear density is the number of eligible students transported per approved route mile. The current formula combines the two measures by counting students in the area two miles on either side of an approved route, or, in hilly or mountainous country, two

and one-half miles on either side of the route. The density calculation is therefore the number of students in an area four or five miles wide times the miles of approved route. Density is reduced to a measure of density per square mile and the district's allowance is drawn from a table, as below.

TABLE 11

PRESENT TRANSPORTATION FUNDING ALLOWANCE

Density Figure	Per Student Allowance
.3000 - .3083	$ 167.00
.3084 - .3249	165.00
.3250 - .3416	163.00
.....	.....
.....	.....
9.6668 or more	33.00

The Special Joint Committee's analysis of the practical impact of the formula revealed various problems: (1) The formula does not work to produce an inverse relationship between district wealth and the state share of funding. (2) The state share as a percentage of district transportation costs is extremely low in urban districts. (3) The state share is greater than costs in 11 districts, but is a very small percentage of costs in many districts. The committee therefore examined alternatives in order to find a more equitable formula.

The committee's findings, briefly stated, were that in most cases transportation costs are driven by linear density and the schedule of state aid for transportation should be determined by linear density, with an adjustment for areal density when linear density is high. The state also should establish a separate formula to assist with the replacement of vehicles. Specific recommendations follow in Section H; the remainder of this section presents the formula the committee developed for operations funding and the methodology behind it.

Methodology and the Formula

Research in other states has generally concluded that linear density is the best predictor of costs of basic transportation for students. The higher the linear density, the greater the cost per mile. Areal density has been found to be useful in grouping school districts for devising formulas for either a rate per mile or the annual cost per student. The formulas have taken the form of regression formulas driven by the school district's linear density. Within the areal density groups, school districts would have a curve of best fit derived so that there would be different rates for districts as a function of their linear density.

The time available for research precluded extensive data gathering in districts and, therefore, required the use of the Department of Education's

existing data base and data analysis services. The Department lacks a statistical software package for research and development functions. It was, therefore, impossible to develop formulas which reflect the state of the art in transportation formula construction.

As an interim measure, the committee designed an improved transportation formula. School districts were grouped by linear density as shown below in Table 12:

TABLE 12

PROPOSED TRANSPORTATION FUNDING ALLOWANCE

Group	Rate Per Vehicle Mile
1. 0 - .75	$ .90
2. .76 - 1.50	1.09
3. 1.51 - 2.25	1.25
4. 2.26 - 3.00	1.38
5. 3.01 - 3.75	1.69
6. 3.76 - 4.50	1.73
7. 4.51 - 5.25	1.94
8. 5.26 - 6.00	2.30
9. 6.01 - up (below 150 in areal density)	2.71
10. 6.01 - up (150 or above in areal density)	3.20

The committee used the following methodology: it found the total current operating costs for the districts in each group less bus replacement and student activity transportation expenses and divided the total for each district by the total daily approved route miles times 175 (number of days in a school year) to derive a rate per mile for current operations. In the case of groups 9 and 10, the added qualification of areal density was used to divide districts into two groups because the high cost of extremely high areal density districts was artificially producing an unnecessarily high figure for districts with high linear but not high areal populations.

The committee devised a bus replacement cost formula which will divide the size of a district's active fleet plus relief units by 10 and multiply the result by the 1985-86 average bus cost for the state (which was reported to be $25,000 per unit). The number 10 in the formula reflects the assumption that the average bus is serviceable for 10 years. The formula thus provides the cost of replacement of one-tenth of a fleet annually in order to maintain an average bus age of 5 years in each district.

A district's total transportation allotment would thus comprise two elements: (A) the district's linear density group rate per mile times the annual approved route miles plus (B) the amount produced by the bus replacement formula. The annual cost of this transportation allotment would be $66,000,000, which approximates the state total of district expenditures in the 1984-85 school year.

Detailed recommendations appear in Section H, below.

H. TRANSPORTATION RECOMMENDATIONS

The following are recommendations for legislation. Enactment would insure that the transportation allocation system of the basic school program will respond to the changing needs for school transportation in Oklahoma.

1. The State Department of Eduction should collect transportation data and should develop a uniform auditing procedure for statewide use.

2. The long-term formula for determining district maintenance and operations costs for transportations should be based on linear density, with weighting for areal density where appropriate.

   Costs should be determined by an equation of the form:

   $$C/P = a \times LD^b$$

   where
   - C/P = annual cost/pupil transported daily
   - a = a derived coefficient of LD
   - LD = linear density of the school transportation system in question, defined as pupils transported daily per daily operating mile
   - b = a derived exponent of LD

   Furthermore, school districts in the state should be grouped together according to their pupil areal densities (ADM per square mile of district area). The coefficient a and the exponent b in the above formula should be derived independently for each such group. It should be the duty of the State Board of Education to determine the number and the makeup of the relevant groups. It should also be the duty of the State Board of Education to derive the coefficient a and the exponent b for each group.

3. A school district operating an approved special education program for exceptional children should be entitled to a transportation allotment for each exceptional child who cannot be adequately served by the regular system and for whom the district provides transportation. A formula for a special transportation allocation similar to that for regular transportation should be developed.

4. The state should reimburse districts for bus replacement cost for both regular and special education transportation systems according to the following procedures.

a. A district's load factor (pupils transported per bus used) should be computed through the use of the following formula:

$$LF = a \times LD^{b}$$

where
- LF = load factor of the district
- a = a derived coefficient of LD
- LD = linear density of the school transportation system
- b = a derived exponent of LD

b. The number of buses allowed the district for operation of the transportation system should be determined by dividing the number of pupils actually transported by the load factor obtained in (a) above.

c. To allow for needed spare buses, an appropriate multiplier should be applied to the number of buses derived in (b) above. The State Board of Education should be responsible for determining the multiplier.

d. The number of buses to be funded annually should be determined by dividing the average bus life in years into the total bus allowance derived in (c) above. Ten years should be used as the average bus life until a more accurate figure can be determined.

e. The capacity of the buses to be funded for a given district should be determined by the load factor derived in (a) above. The applicable capacity should be the next standard capacity bus above the derived load factor, chosen from a list of standard manufacturers' rated capacities. The Board of Education should determine standard capacities.

f. The price for each standard capacity bus should be the current maximum price set by the State Board of Education.

g. The bus reimbursement allotment should be determined by multiplying the price obtained through (e) and (f) above by the number of buses obtained in (d) above.

The State Board of Education should be responsible for determining the coefficient a and the exponent b for the formula in (a). It should also be responsible for determining the utility of a set of groups like those for the maintenance and operation formula for the purposes of deriving load factor.

5. The State Board of Education should set the cost per mile for reimbursing the transportation of pupils by private automobile. The superintendent of each district should be responsible for reporting the annual number of miles to be reimbursed.

6. Where school transportation is accomplished by contract with a public carrier, the State Board of Education should calculate a transportation operating allotment by multiplying the number of eligible students transported by the average annual allotment per child provided for districts in the same areal density group.

7. The State Board of Education should be responsible for examining the efficient structure of all district transportation systems for the purpose of measuring their linear densities. Criteria for efficiency should be decided by the Department of Education. Each district should be charged with the economical operation of its system, and should be allowed to change its structure from that approved by the Department in order to accomplish local purposes (e.g., transportation of ineligible pupils). The district should record the additional costs it incurs from such changes.

8. The State Department of Education should be responsible for monitoring the entire system to insure equitable funding for transportation program needs as defined in law. It should recalculate the transportation formulas every other year or more often.

9. All transportation allotments should be included as part of the basic school program and should be funded by the state on the same basis as all other basic school program expenditures.

10. The mileage limit of eligibility for transportation at shared state-local expense should be 1.5 miles.

CHAPTER V

SOURCES OF REVENUE

SUMMARY OF CHAPTER V

The program developed in Chapter IV would cost a total of $2.1 billion annually, which is about $665 million or 46% more than present total expenditure for public schools in Oklahoma. This chapter examines some funding mechanisms to help meet the additional need. The Special Joint Committee's principal recommendations are as follows:

1. A uniform 12% assessment ratio rate for ad valorem purposes, and valuation of property at full market-use value throughout the state.

2. Charging the full allowable 39 mills of local effort against program costs in determining state aid.

3. In instances of students being transferred between districts, payment of a fee by the district from which the transferred student comes.

4. Distribution of dedicated state revenues through the formula instead of the present method.

This chapter examines the following subjects:
A. Local sources of revenue.
B. Dedicated state revenue.
C. Cost versus local income.

A. LOCAL SOURCES OF REVENUE

The main source of local income to school districts is the ad valorem tax levy. Seven different millage rates may be applied to the assessed value to yield operating, capital improvement and debt service revenues. The remainder of local income is derived from gifts, student fees, transfer fees, property sale and rental, interest income, tuition, and the like, and from an apportionment of the county mortgage tax.

Ad Valorem Taxes

Districts may levy 15 mills in support of the basic school program. These 15 are chargeable for determination of state aid. Also chargeable are 3 of the 4 mills that constitute a county-wide levy, all 4 mills of which is distributed per student to school districts in the county. (Thus there is a total of 18 mills chargeable for Foundation Aid.)

Additionally, all districts collect a 5 mill county levy, a 5 mill emergency levy and a 10 mill local support levy. These 20 mills are power equalized through the state Incentive Aid formula, which means that this formula provides a level of aid to each school district sufficient to

guarantee that each mill of tax rate generates the same number of dollars per student throughout the state. The entire 39 mills listed in this paragraph are unrestricted in use. Currently, the 35 mill ad valorem levied by local districts yields about $309 million statewide. The 4 mill county levy yields an additional $37 million.

Districts may also collect a 5 mill building fund levy for the purchase, construction, remodeling, maintenance, and equipping of buildings and in some cases may use these 5 mills funds for operating costs as well. These 5 mills are outside all formula considerations. Districts are also authorized to establish whatever levy for debt service is necessary to pay principal and interest on bonds. The total amount of bonds issued may equal 10% of the district's total assessed valuation. The debt service levy is restricted to this purpose and is outside all formulas.

As is well known in Oklahoma, court decisions require county assessment ratios to vary by no more than 6% of actual market-use value of the real and personal property subject to ad valorem taxation, with a supposed target ratio of 12 percent. In actuality, for the school year 1985-86 only 5 counties are at or above 12%. The highest current assessment ratio is 12.73%. Thirty three counties are at less than 10%; half of all counties are at 10.2% or less.

If all real and personal property were to be assessed at 12%, about $102 million in additional revenue would be available for public education, or nearly $175 per student. It is the committee's recommendation that this be mandated, and in all computer modeling associated with this entire project, the district's taxable wealth and tax levy have been adjusted accordingly.

The committee also recommends that all property valuation for ad valorem purposes be at full market-use value in all counties throughout the state. Full valuation, with the assessment ratio remaining at 12% as recommended above, would produce substantial additional local revenues for schools. Because the process of valuation will be lengthy, and because precise estimates of its impact on district revenues are not available, this report does not attempt to adjust figures for the possible impact of full market-use valuation.

The committee also considered a recommendation to lift the 39 mill limit. It was the committee's consensus that such a proposal be explored with consideration be given to equity in designing the formula.

Charges Against Foundation Aid

As mentioned earlier, only 18 mills are chargeable in determining Foundation Aid--that is, the 15 mills support for the basic school program plus 75% of the county 4 mill rate. An additional 20 mills are virtually chargeable in that they are cost-adjusted through the use of weighted ADM and then power-equalized. (That is to say, the adjustment provides an increasing amount of state dollars as districts' ratios of property valuation per student decline.) Under current formulas, however, differing methods are used in calculating the impact of the 18 mill and the 20 mill components. The Special

Joint Committee recommends that, in keeping with the unitary determination of program cost described in the previous section, all 39 mills of operating levy be fully chargeable against program cost in determining state aid. The committee considered but decided against inclusion of the 5 mill building fund levy.

Since some districts' tax income equals or exceeds the cost of their programs as determined by formula, an amount of tax levy is "lost" from chargeability--the amount that exceeds the program cost. The Committee considered two proposals to recapture this revenue. Both were rejected on the grounds that implementation would be difficult and cost savings would be only in the range of $2.3 million. The proposals were, A), that the excess amount be remitted to the state and, B), to collect all ad valorem levies countywide and distribute them on a per student basis, thus broadening the distribution.

Transfer Fees

When a student resides in one district but is educated in another, the taxpayers of the "sending" district receive a free ride at the expense of the taxpayers of the "receiving" district to the extent that local taxes pay the cost of education.

Under Oklahoma law, only a few sending districts are required to pay a transfer fee to cover this cost. However, as an offset for this cost dependent school districts do not fully share in dedicated revenues. This system is doubly flawed: there is no relationship between ad valorem revenues deferred and the amount of lost or gained dedicated revenue, and those dependent districts being charged fees are, in effect, paying twice.

These problems would be partially resolved through the recommendations concerning dedicated revenues, but some taxpayers would continue to receive a free ride. The committee recommends that all sending districts pay a transfer fee to the receiving district. The fee paid for each transfer should be the amount of ad valorem operating levy per ADM of the sending district.

It is further recommended that these fees be fully chargeable for formula funding purposes against the receiving district and credited to the sending district, to prevent double counting. In general this procedure will have no overall impact on formula costs, with two exceptions. It would recapture some of the lost revenue from extremely wealthy sending districts. More important, it would provide for greater equity in the event the Legislature does not fully adopt the recommendations of the Special Joint Committee and some local income is left not fully chargeable.

Other Local Income

Income from the gift, fee, rental, interest and tuition income described earlier totals about $56.6 million statewide. This money is unrestricted in its use, and is therefore available to cover program costs. However, it is not a stable source of income, and currently is not chargeable for reducing state costs.

B. DEDICATED REVENUE

Various state taxes and fees are refunded or "dedicated", at least in part, to the county or district of origin. Those credited to the county are then distributed to the districts on a per student basis for that county, except that dependent districts receive no share of auto license fees and gross production taxes. Dedicated revenues are state taxes, but are currently treated as if they were local income.

The single dedicated revenue distributed on a statewide basis per pupil is school land money.

While these revenues are chargeable in determining Foundation Aid, there is again a loss of funds from formula distribution in cases in which the sum of the district's levy and the dedicated revenue exceeds program cost. This loss can be eliminated by retaining these funds as general revenue and distributing them through the formula.

C. COST VERSUS LOCAL INCOME

The total cost of the model program presented in Chapter IV is more than $2.1 billion. Subtracting the $504 million potential local revenue from the total cost yields a state cost of about $1.6 billion. Additionally, $56.6 million of the $504 million is non-tax local income, which is not chargeable, increasing the cost to nearly $1.7 billion. This is substantially in excess of the approximately $1.06 billion in appropriated and dedicated revenues being paid by state this year.

This is true even though those figures assume the implementation of the recommendations of this report--that there be a unitary formula against which 39 mills are fully chargeable, and that the state prevent the loss of dedicated revenue now occurring through per student disbursement. If dedicated revenue is allowed to remain assigned to the district or county of origin, or if a lesser amount of local income is chargeable, the funding shortfall would be greater. Most districts would not be able to offer an optimum program while a few would have more than sufficient revenue.

The likelihood that the state cannot meet the costs of the model program in the near future is faced in the next chapter, with recommendations for an improved and attractive program at a lower cost than the model program.

CHAPTER VI

SHORTFALL ADJUSTMENTS

SUMMARY OF CHAPTER VI

The revisions to funding mechanisms recommended in Chapter V would raise additional funds for education and provide a greater equity of revenues among districts than exists now. In particular, a requirement that real and personal property assessment ratios be uniformly set at 12% would increase local funding by $102 million per year, to about $448 million. Legislative enactment of this recommendation could immediately produce greater equity and funding for common education. Additional future revenues, not taken into account in this report, would be realized if all real property valuation in the state were made, as law requires, at full market-use value.

Despite this increase, the Special Joint Committee recognized that the state's present financial climate will not allow the state to increase funding to meet the more than $2 billion expenditure required by the optimum program outlined in Chapter IV. Therefore this chapter reconsiders the model presented there in an effort to reduce its cost to a more manageable figure. This reflects the committee decision that the lengthy process of redesigning the optimum model was preferable to allowing cuts to be made on an arbitrary or across-the-board basis. In this chapter, charts 13 through 23 depict the revised models.

The chapter examines a number of possible ways to enhance funding or the equitable distribution of present funding. The committee rejected a formula revision that would reduce grants to wealthier districts, a minimum campus size as a qualification for state aid, and a requirement for district consolidation.

This chapter examines the following subjects:

A. Minimum versus optimum program.
B. Changing the qualifications for state aid.
C. Proration methods when funding must be reduced.

A. MINIMUM VERSUS OPTIMUM PROGRAM

Rather than adopting an arbitrary system of cutting back, the committee chose to reconsider the model, eliminating expenditures that are not deemed essential even though they contribute to a high quality of education

The one change common to all models was a reduction from a recommended 15% level of benefits for personnel to the 11.14% that currently is the state average. For the elementary and middle school models, the cuts focused on non-instructional expenses. Numbers of school nurses, librarians, aides, clerks, and secretaries were cut from the models. In the high school model, planned instructional expenses were cut by increasing the recommended student/teacher ratio from 20:1 in the optimum models to 22:1. The committee found the new ratio acceptable because the original recommendation was far

from current practice. The revised recommendation is closer to but still below the current average ratio for high schools.

These changes meant that, other than in employees benefits, there was little change in the elementary or middle school models, with major savings coming from the changes in the high school model and from a revised and reduced calculation of the impact of smaller campus sizes. Another saving gained from the high school models was the elimination of the 75 student campus because of the new higher student/teacher ratio. The committee considered and rejected other possible cost reductions. The savings from the recommendations made here are about $100 million.

Charts 13 through 23 on the following pages show the results. [Text resumes on page 64]

CHART #13

COST OF REGULAR EDUCATION
ELEMENTARY MODEL I

470 Pupil Elementary K* - 5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	20**	$ 15,060	$ 301,200
Special Subject Teachers			
Music	1	15,060	15,060
Art	1	15,060	15,060
P.E.	1	15,060	15,060
Principals	1	27,432	27,432
Counselors	1	21,532	21,532
Librarians	1	18,509	18,509
Secretaries	1	10,967	10,967
Teacher Aides	2	6,716	13,432
Office Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	2	11,729	23,458
	Total Salaries		$ 481,386
	+11.14% for benefits		53,627
	Total Personnel		$ 535,013

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,244
Supplies/Materials	65
Textbooks	30
Indirect Cost***	335
Total Current Operating	$ 1,674

* Half-day Kindergarten results in 430 Full Time Equivalent (FTE) students
** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5
*** 25% of other per FTE costs for providing districtwide leadership and services

CHART #14

COST OF REGULAR EDUCATION
ELEMENTARY MODEL II

200 Pupil Elementary K* - 5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	11**	$ 15,060	$ 165,660
Special Subject Teachers			
Music	.5	15,060	7,530
Art	.5	15,060	7,530
P.E.	.5	15,060	7,530
Principals	1	27,432	27,432
Counselors	.5	21,532	10,766
Librarians	.5	18,509	9,255
Secretaries	1	10,967	10,967
Teacher Aides	.5	6,716	3,358
Library Aides	1	6,716	6,716
Office Clerks	.5	6,716	3,358
Head Custodians	1	12,960	12,960
Custodians	2	11,729	11,729
	Total Salaries		$ 284,791
	+11.14% for benefits		31,726
	Total Personnel		$ 316,517

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,720
Supplies/Materials	85
Textbooks	30
Indirect Cost***	458
Total Current Operating	$ 2,293

* Half-day Kindergarten results in 184 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing districtwide leadership and services

CHART #15

COST OF REGULAR EDUCATION
ELEMENTARY MODEL III

100 Pupil Elementary K* - 5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	5**	$ 15,060	$ 75,300
Special Subject Teachers			
Music			
Art	1	15,060	15,060
P.E.			
Teaching Principals	1	21,947	21,947
Counselors	.5	21,532	10,766
Librarians	.33	18,509	6,108
Secretaries	.5	10,967	5,484
Teacher Aides	.5	6,716	3,358
Custodians	1	11,729	11,729
Total Salaries			$ 149,752
+11.14% for benefits			16,682
Total Personnel			$ 166,434

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,809
Supplies/Materials	100
Textbooks	30
Indirect Cost***	485
Total Current Operating	$ 2,424

* Half-day Kindergarten results in 92 Full Time Equivalent (FTE) students

** 1 to 20 at ~~K~~, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing districtwide leadership and services

CHART #16

COST OF REGULAR EDUCATION
ELEMENTARY MODEL IV

50 Pupil Elementary K* - 5

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	3**	$ 15,060	$ 45,180
Special Subject Teachers			
Music			
Art	.5	15,060	7,530
P.E.			
Teaching Principals	1	21,947	21,947
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	.33	10,967	3,619
Custodians	.5	11,729	5,865
	Total Salaries		$ 97,355
	+11.14% for benefits		10,845
	Total Personnel		$ 108,200

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,404
Supplies/Materials	100
Textbooks	30
Indirect Cost***	634
Total Current Operating	$ 3,168

* Half-day Kindergarten results in 45 Full Time Equivalent (FTE) students

** 1 to 20 at K, 1, 2, 3 and 1 to 25 at 4 and 5

*** 25% of other per FTE costs for providing districtwide leadership and services

CHART #17

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL I

700 Pupil Middle School, Grades 6, 7 and 8

Computation of Personnel Cost

CLASSIFICATION	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	33*	$ 15,060	$ 496,980
Principals	1	29,167	29,167
Asst. Principals	2	28,069	56,138
Counselors	3	21,532	64,596
Librarians	1	18,509	18,509
Consultant for Computer Applications	.5	27,096	13,548
Secretaries	1	10,967	10,967
Teacher Aides	3	6,716	20,148
Library Aides	1	6,716	6,716
Clerks	2	6,716	13,432
Head Custodians	1	12,960	12,960
Custodians	3	11,729	35,187
Total Salaries			$ 778,348
+11.14% for benefits			86,708
Total Personnel			$ 865,056

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,236
Supplies/Materials	75
Textbooks	40
Co-curricular	35
Indirect Cost**	347
Total Current Operating	$ 1,733

* 1 to 25 with 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $36 more per FTE

** 25% of other per FTE costs for providing district-wide leadership and services

CHART #18

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL II

350 Pupil Middle School, Grades 6, 7 and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	18.5**	$ 15,060	$ 278,610
Principal	1	29,167	29,167
Asst. Principals	.5	28,069	14,035
Counselors	1.5	21,532	32,298
Librarians	1	18,509	18,509
Secretaries	1	10,967	10,967
Teacher Aides	1.5	6,716	10,074
Library Aides	.5	6,716	3,358
Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	1	11,729	11,729
	Total Salaries		$ 428,423
	+11.14% for benefits		47,726
	Total Personnel		$ 476,149

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,360
Supplies/Materials	100
Textbooks	40
Co-curricular	50
Indirect Cost***	388
Total Current Operating	$ 1,938

* A Consultant for Computer Applications and a nurse are to be available districtwide from the Indirect Cost allocation

** 1 to 22 with a 7 period day and teachers teachers teaching 6 of 7 periods; a 6 period day would cost $80 more per FTE

*** 25% of other per FTE costs for providing districtwide leadership and services

CHART #19

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL III

100 Pupil Middle School, Grades 6, 7 and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	6.5**	$ 15,060	$ 97,890
Teaching Principals	1	22,407	22,407
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	.5	10,967	5,483
Library Aides	.33	6,716	2,216
Custodians	1	11,729	11,729
	Total Salaries		$ 152,939
	+11.14% for benefits		17,037
	Total Personnel		$ 169,976

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,700
Supplies/Materials	125
Textbooks	40
Co-curricular	70
Indirect Cost***	484
Total Current Operating	$ 2,419

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 16 with a 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $154 more per FTE

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #20

COST OF REGULAR EDUCATION
MIDDLE SCHOOL MODEL IV

50 Pupil Middle School, Grades 6, 7 and 8

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	3**	$ 15,060	$ 45,180
Teaching Principals	1	22,407	22,407
Counselors	.33	21,532	7,106
Librarians	.33	18,509	6,108
Secretaries	.33	10,967	3,619
Custodians	.5	11,729	5,864
	Total Salaries		$ 90,284
	+11.14% for benefits		10,058
	Total Personnel		$ 100,342

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,007
Supplies/Materials	125
Textbooks	40
Co-curricular	70
Indirect Cost***	561
Total Current Operating	$ 2,803

* A Consultant for Computer Applications and a nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 16 with a 7 period day and teachers teaching 6 of 7 periods; a 6 period day would cost $154 more per FTE

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #21

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL I

1,200 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	65**	$ 15,060	$ 978,900
Principals	1	28,120	28,120
Asst. Principals	3	28,471	85,413
Counselors	4	21,532	86,128
Librarians	2	18,509	37,018
Consultant for Computer Applications	1	27,096	27,096
Registrars	1	12,198	12,198
Secretaries	1	10,967	10,967
Counselors' Secretaries	1	10,967	10,967
Finance Clerks	1	10,800	10,800
Teacher Aides	4	6,716	26,864
Library Aides	3	6,716	20,148
Clerks	2	6,716	13,432
Head Custodians	2	12,960	25,920
Custodians	6	11,729	70,374
	Total Salaries		$ 1,444,345
	+11.14% for benefits		160,900
	Total Personnel		$ 1,605,245

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,338
Supplies/Materials	100
Textbooks	60
Co-curricular	65
Indirect Cost***	391
Total Current Operating	$ 1,954

* 1 to 22 with 6 period day and teachers teaching 5 of 6 periods

** 25% of other per FTE costs for providing district-wide leadership and services

CHART #22

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL II

400 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	30**	$ 15,060	$ 451,800
Principals	1	28,120	28,120
Asst. Principals	1	28,471	28,471
Counselors	2	21,532	43,064
Librarians	1	18,509	18,509
Secretaries	1	10,967	10,967
Registrar and Financial Assistants	1	12,198	12,198
Teacher Aides	2	6,716	13,432
Library Aides	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	2	11,729	23,458
Total Salaries			$ 649,695
+11.14% for benefits			72,376
Total Personnel			$ 722,071

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 1,805
Supplies/Materials	125
Textbooks	60
Co-curricular	95
Indirect Cost***	521
Total Current Operating	$ 2,606

* A Consultant for Computer Applications and nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 16 with 6 period day and all teachers teaching 5 of 6 periods

*** 25% of other per FTE costs for providing district-wide leadership and services

CHART #23

COST OF REGULAR EDUCATION
HIGH SCHOOL MODEL III

150 Pupil High School, Grades 9, 10, 11, and 12

Computation of Personnel Cost

CLASSIFICATION*	NUMBER	UNIT COST	TOTAL COST
Classroom Teachers	16**	$ 15,060	$ 240,960
Principals	1	28,120	28,120
Counselors	.5	21,532	10,766
Librarians	.5	18,509	9,255
Secretaries	1	10,967	10,967
Teacher Aides	1	6,716	6,716
Library Aides	.5	6,716	3,358
Clerks	1	6,716	6,716
Head Custodians	1	12,960	12,960
Custodians	1	11,729	11,729
	Total Salaries		$ 341,547
	+11.14% for benefits		38,048
	Total Personnel		$ 379,595

Per Pupil District Cost

Amounts are determined on a Full Time Equivalent Student's cost

Total Personnel	$ 2,531
Supplies/Materials	150
Textbooks	60
Co-curricular	125
Indirect Cost***	717
Total Current Operating	$ 3,583

* A Consultant for Computer Applications and nurse are to be available district-wide from the Indirect Cost Allocation

** 1 to 11 with 6 period day and all teachers teaching 5 of 6 periods

*** 25% of other per FTE costs for providing district-wide leadership and services

B. CHANGING THE QUALIFICATIONS FOR STATE AID

The model and various proposals regarding the formula in this report would significantly increase the dollar amount of funds distributed to small campuses and districts, and would have a limited effect of increasing funding to wealthier districts to the extent they increase their controllable expenditure for teachers' salaries. The committee examined formula revisions to control these costs.

Qualifier based on district wealth

In many states, there is a statistically significant correlation between district wealth and teacher experience. The obvious explanation of the correlation is that wealth enables a district to hire and retain more experienced and more highly educated teachers Thus a formula that fully subsidizes these factors tends to reward wealthy districts. A way to adjust this is to use some kind of wealth test, such as adjusting the basic index by the percentage of state-local sharing of the regular program. This approach would reduce the model cost by more than $100 million.

The committee declined to accept this approach for two reasons. The committee recommendation that all 39 mills be fully chargeable would end the disproportionate ability of wealthy districts to hire experience. Also, an analysis of current hiring in Oklahoma showed no major disequalization in hiring. This is probably due to the preponderance of small districts which tend to have an immobile teacher population.

Qualifier based on campus or district size

The models the committee designed require significantly higher per student costs for a quality education on small campuses (which are defined as any that are smaller than the optimum size for the kind of school at issue) than on optimum sized campuses. Therefore, the fewer small campuses, the less the overall funding shortfall. The committee considered various means of inducing districts to approximate the optimum campus size, principally through disincentives for doing the contrary.

Small campuses exist for various reasons.

1. Insufficient district student population for campuses of optimum size.

2. District policy.

3. Shifting residential patterns that have reduced enrollment in neighborhood schools.

In the first case, district consolidation, the use of multi-district cooperative schools, or a change to dependent district status would be needed to reach optimum campus sizes. In the other two cases, the closing of schools or alterations in attendance boundaries would suffice. Any of these measures might require construction of new classrooms at some schools.

The committee discussed at length the degree to which a decision to maintain small campuses is controllable. Consideration was given as to whether some districts had no choice but to maintain small campuses due to the large territory and sparse settlement of those districts. Eligibility criteria such as number of square miles or low pupil/sq. mile density were considered. The size below which a district mathematically could not have only optimally-sized campuses was determined to be about 4,000 ADM, and was discussed as an upper limit on district eligibility.

Discussion also focused on minimum sizes for campuses, centering on whether campuses below a certain size were either too costly or too narrow in offerings to justify. Some preference was expressed for use of a district-based formula rather than a campus-based formula. The argument was made that a compus-based formula would encourage a district with two elementary schools of 100 students each to maintain both, in spite of the more efficient possibility of one school of 200 students, with the expense subsidized by taxpayers in other districts who might have locally made the painful choice to close schools and save dollars.

The countervailing position was that politically, at least, ther was no likelihood of consolidation of districts. Furthermore, the decision to consolidation of districts. Furthermore, the decision to consolidated schools within districts is equally painful, causes as much dissension, and it politically no more likely. Therefore, while it is a local choice, the cost of failure to subsidize the inefficiently of small schools would be borne by the children.

The prevailing view was that, since the arguments revolve around political considerations, the decision on qualifiers is a political decision best left to the legislature. Therefore, the committee makes no recommendation in this area.

C. PRORATION METHODS WHEN FUNDING MUST BE REDUCED

If specific program adjustments fail to bring the program cost within the range of available funding, broad-based cuts in spending must be made. There are four basic methods: increasing funding through an increased local tax rate, reducing aid by a fixed number of dollars per pupil, reducing the program cost by a fixed percentage, and reducing state aid by a fixed percentage.

An increased local tax rate is the most equalizing approach. It would raise more revenue per student in wealthy districts than in poorer districts, thus reducing formula-based aid to wealthier districts proportionately more than it would reduce aid to poorer districts. Since the committee has recommended 100% chargeability of the local millage, the use of this method would require that the millage ceiling be lifted.

The second and third methods are mutually exclusive. Proponents of reducing aid by a fixed number of dollars per pupil argue that this approach is equitable because it acts without regard to districts' variable costs.

Others feel that this approach has a disproportionate cost for lower-cost programs, and could drive funding for those programs below a level that is minimally acceptable. Such persons favor reducing program cost by a fixed percentage, which would impose a higher dollar loss per student in expensive programs than in lower-cost programs. The equity lies in the fact that all programs, regardless of cost, would be reduced by an equal percentage.

The final method, percentage reduction of state aid, is substantially disequalizing, since poorer districts tend to benefit more from the formula.

CHAPTER VII

TRANSITION FORMULAS

Transition formulas, also known as "hold-harmless" provisions, are used to ease the budgetary and political impact of fundamental changes in state funding for public education. In times of growth, a hold-harmless provision may take the form of guaranteeing the current level of funding for one or more subsequent years. Such action constitutes a transition to formula funding, since the rising levels of formula support will soon catch up with the guarantee.

When revenues are stable or declining, such an approach defeats the purpose of formula funding, since no transition movement can occur. In addition, the hold-harmless provision "captures" revenue which would otherwise go to poor or high cost districts, perpetuating inequity. In such times, transition formulas frequently use declining percentages of guarantee. For example, the hold-harmless provision might guarantee 50% of the difference between current and formula funding as a "cushion" in the first year, 25% in the second year, and full formula funding for the third year and after.

Guaranteeing gross dollar amounts can actually increase inequity if student population declines. This has been the case in Oklahoma where many districts have achieved increases in per pupil state support, due to declining enrollment. This can occur even if the local tax base and consequent tax collections show a dramatic increase. Such an increase would normally cause a decrease in state aid when no formula change occurs.

The first inequity can be avoided by making the hold-harmless a guarantee of per pupil amounts. Thus, a decline in enrollment would be reflected in total aid. This is, after all, what occurs to districts not affected by the hold-harmless. The second problem can be addressed by making the hold-harmless a guarantee of the effect of previous formulas. In other words, it is figured by calculating aid under both old and new formula, using current data, and guaranteeing the higher. Thus, changes in local wealth have their normal effect.

In the event future transition formulas are used, they should be structured as fixed life. Obviously, the existence and nature of a transition formula is a political decision. As such, the committee makes no recommendation, leaving such a decision to the Legislature.

CHAPTER VIII

RECOMMENDATIONS FOR ACTIONS

1. Since program costs are primarily determined by enrollment, all calculations should be based on the current average daily membership (ADM) of the district.

2. The current dual formula structure should be replaced with a single Foundation Aid program, to which all weights would be uniformly applied.

3. The full 39 mills of local operating ad valorem taxes, together with revenue from transfer fees, should be fully chargeable.

4. All real and personal property should be uniformly assessed as 12% of value. The amount of ad valorem levy the funding formula charges to the district should be based on this value. In addition, the state should require all property on which ad valorem taxes are imposed to be valued at full market-use value.

5. State taxes and fees that currently are dedicated to the county or district of origin for education purposes should instead be kept as part of the general revenue used to fund the Foundation Aid program and be distributed through the formulas.

6. The minimum regular program allotment should be $1,674 per ADM. This represents the cost of an elementary school student in the regular program taught by a beginning bachelor's degree teacher. The optimum regular program allotment should be $1,728 per ADM.

7. Each pupil in grades K-5 should be equal to one weighted ADM. In grades 6-8 each student should equal 1.035 weighted ADM, and in grades 9-12 each pupil should equal 1.167.

8. The costs of campuses of less than optimum size should be reflected through the following formulas. Each formula describes a curve that has been calculated from the models contained in this report. The numbers in each formula are calculated constants - they do not imply any "real world" program structures. They simply plot a curve that most closely fits the per pupil costs in the minimum models.

   a. The ADM of an elementary school with fewer than 470 regular ADM should be adjusted by the following formula, which translates higher cost values into additional pupil weights in order to generate more state aid.

This modelling resulted from the observation that the distribution of costs suggested a hyperbolic curve of the type [A/(X+B)]+C=Y. After solving for the various data points, it was possible to adjust the model in each grade grouping by a separate curve of best fit. The numbers in the formulas are mathematical constants derived to reflect rapidly increasing cost as the size of school campuses decline.

$$\left(\frac{74}{ADM + 23} + .85 \right) \times ADM = \text{Elementary Weighted ADM}$$

b. The ADM of a middle school or junior high school with fewer than 700 ADM should be adjusted by the formula:

$$\left(\frac{122}{ADM + 133} + .85 \right) \times 1.035 \times ADM = \text{Middle School Weighted ADM}$$

c. The ADM of a high school with fewer than 1200 ADM should be adjusted by the formula:

$$\left(\frac{292}{ADM + 128} + .78 \right) \times 1.167 \times ADM = \text{High School Weighted ADM}$$

9. For the 1987-88 school year, special education pupils should be weighted on the basis of pupil category. The additional weighted ADM should be calculated by multiplying the weight by the indicated proxy FTE factor and by the number of identified students in each classification:

CLASSIFICATION	WEIGHT	PROXY FTE FACTOR
Educable Mentally Handicapped	3.0	.55
Trainable Mentally Retarded	3.5	1.00
Hard of Hearing	3.0	.50
Deaf	5.0	1.00
Speech Impaired	7.0	.05
Visually Handicapped	3.5	.50
Emotionally Disturbed	3.5	.75
Orthopedically Impaired	3.5	.50
Other Health Impaired	5.0	1.00
Learning Disabled	3.0	.33
Deaf-Blind	5.0	1.00
Multi-handicapped	5.0	1.00

The FTE's of special education pupils (not Economically Disadvantaged, Bilingual, or Gifted and Talented) should be subtracted from the ADM used to compute the regular program costs, unless the student is in a pull-out program of less than 3 hours per day.

For 1988-89, weights should be recalculated on instructional arrangements and actual FTE's should be used.

Other special pupils are weighted as add on student counts.

Economically Disadvantaged	.4
Bilingual or English or Second Language	.5
Gifted and Talented	.4

10. The program cost should be adjusted to reflect the additional cost of employing teachers with experience or advanced degrees, using the formula:

Regular Program Allotment X [(.51 X ETI) + .49]
= Experience Adjusted Program Cost

(.51 represents the percentage that teacher salaries currently are of non-transportation operating expenditures)

11. The program cost should be adjusted to reflect the cost of competing with the enrichment over minimum salary paid by neighboring school districts, using the formulas:

$$\left(\frac{\text{Actual Salaries of County Teachers} - \text{Actual Salaries of District Teachers}}{\text{Minimum Salaries of County Teachers} - \text{Minimum Salaries of District Teachers}} + \frac{\text{Actual Salaries of Quartile Teachers} - \text{Actual Salaries of District Teachers}}{\text{Minimum Salaries of Quartile Teachers} - \text{Minimum Salaries of District Teachers}}\right)$$

Divided by 2
= Raw PDI

((Raw PDI - 1) X .811)) + 1 = PDI

(.811 represents the percentage that all salaries and benefits of all non-transportation personnel currently are of non-transportation operating expenditures)

Experience Adjusted Program Cost X PDI = Adjusted Program Cost

For districts located in counties with only two districts, the salaries of teachers from all districts that border on the district shall be used in place of the first ratio.

For districts that border on Oklahoma and Tulsa counties or school districts, the salaries of teachers in the neighboring county shall be added to the salaries of county teachers in the numerator and denominator of the first ratio.

12. Transportation should be funded through two components: an operating allotment and a bus replacement allotment. For 1986-87, the operating allotment will be calculated on the basis of the following rate per approved mile for the indicated linear density groups:

Group	Rate Per Vehicle Mile
1. 0 - .75	$ .90
2. .76 - 1.50	1.09
3. 1.51 - 2.25	1.25
4. 2.26 - 3.00	1.38
5. 3.01 - 3.75	1.69
6. 3.76 - 4.50	1.73
7. 4.51 - 5.25	1.94
8. 5.26 - 6.00	2.30
9. 6.01 - up (if below 150 in areal density)	2.71
10. 6.01 - up (if 150 in areal density or above)	3.20

Thereafter, operating costs should be calculated by the formula:

$$C/P = a \times LD^b$$

where: C/P = annual cost/pupil transported daily
a = derived coefficient
LD = Linear density
b = derived exponent

Districts should be grouped according to areal density with the coefficient and exponent separately derived for each group.

For 1987-88, the bus replacement allotment should be calculated by dividing the number of approved buses by 10 and multiplying times the average bus cost in Oklahoma (about $25,000). Therefore, the formula should be based on the load factor of the district, the number of pupils transported, the average bus life, and the bus price for buses of various load factors.

CHAPTER IX

RECOMMENDATIONS FOR FURTHER STUDY

1. The various instructional arrangements (resource room, self-contained classroom on a regular campus, etc.) used in teaching special education pupils must be determined. A study should be conducted on the relative cost of these arrangements to the cost of the regular program, so weights may be determined. Districts must begin to collect pupil counts, at least in sample weeks, for each program to use in establishing FTE's by program.

2. A regression analysis of transportation cost factors must be conducted to determine the values for the coefficients, exponents, and groupings detailed in the transportation section of this report.

3. An econometric regression model should be created to accurately depict the impact of uncontrollable market factors on salaries. Similar analysis should examine the impact of market differences on other major budget items. The results of these analyses should be used to develop a price differential index to replace the temporary version described in this report. The data used in the models should then be annually updated, with appropriate adjustments made to the index.

4. Although the committee recommends immediate adoption of the "minimum" model, the committee contends that the state of Oklahoma should possess an optimum education program. Therefore, it recommends further work on establishing a plan and timetable for transition from the minimum to the optimum program. The plan should set a truly competitive minimum salary schedule that would attract and hold top-notch personnel in teaching.

5. A study using information collected on basic capital cost needs of Oklahoma school districts should propose formulas for state assistance in equalizing local ability to provide for minimum capital cost needs.

6. The Committee recognizes the high cost associated with small school campuses located through out the state. It recommends the continued study of developing efficient educational delivery systems in all areas that impact the cost or quality of education.

APPENDIX A

Constitutional and Statutory Changes Required for Policy Implementation of Models

All statutory citations are to the
1986 Supplement to the Oklahoma Statutes

Level of Revenue

1. Establishment of a 12% statewide assessment ratio on real and personal property.

   - Title 68, Section 2463.

2. Consideration of the removal of limitations on number of mills levied.

   - Oklahoma Constitution, Article 10, Sections 9 and 10.

Distribution of Revenue

3. Redistribution through formula of gross production tax on oil and gas dedicated to schools.

   - Title 68, Section 1004.

4. Redistribution through formula of auto and farm truck license fees dedicated to schools.

   - Title 47, Section 1104.

5. Redistribution through formula of revenue from school lands.

   - Oklahoma Constitution, Article II, Section 3.

6. Redistribution through formula of revenue from the tax on rural electric cooperatives.

   - Title 68, Section 1806.

Formula Adjustments

7. Removal of limitation on chargeability of millage.

   - Oklahoma Constitution, Article 10, Section 9, Subsections (b) and (e).

8. Revision of definitions of formula terms.

   - Title 70, Section 18-107.

9. Revision of State Aid Formula.

   - Title 70, Section 18-109.2.

10. Revision of definitions of Weighted Average Daily Attendance and the Small School District Formula.

    - Title 70, Section 18-109.3.

11. Revision of definitions of Weighted Average Daily Membership and the Small School District Formula.

    - Title 70, Section 18-109.4.

12. Revision of definition of Average Daily Attendance.

    - Title 70, Section 18-111.

Transitional Provisions

13. Modification of the Allocation Guarantee provision.

    - Title 70, Section 18-112.